SimJack   Help   Contents

Welcome!   This help facility is set up in two sections.   The first section goes into the details of the application itself.   The second section contains tutorials for beginners as well as for experts.

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   The Simple Count
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Game Menu   **Hot Key(s)**

   New   ◻   **Ctl+N**

      Open 🖿   **Ctl+O**

      Save 💾 **Ctl+S**

      Save As

      Exit   **Alt+F4**

The **Game Menu** includes commands that enable you to open and save game parameters.   The game parameters consist of the **Advice Parameters**, **Rules of the Table**, and the **Shoe Parameters**.   Saving the game parameters is useful when changes have been made and you want to save the game parameters to disk.   When you are saving or opening game parameter files, keep in mind that they have the extension of **.SJP** .   Also, you can include a game parameter file as a command line argument when you first run the program .   The file is specified through the Program Manager's Properties command under the File Menu.

The **New** command loads the default set of game parameters, shuffles the shoe, and resets your worth to $200.00.   If the current set has been changed, then you will be prompted to save the changes.

The **Open** command loads an existing set of game parameters, shuffles the shoe, and resets your worth to $200.00.   If the current set has been changed, then you will be prompted to save the changes.

The **Save** command stores the current set of game parameters to disk.   If the current set has not been named, then you will be prompted for the new name.

The **Save As** command stores the current set of game parameters to disk with a new name.   You will be prompted for the new name.

The **Exit** command quits the game.   If the current set of game parameters have been changed, then you will be prompted to save the changes.

Edit Menu	Hot Key(s)
Advice	**Ctl+A**
Advice Tables	
Count Advice Button	
Rules	**Ctl+R**
Allowable Splits	
Allowable Double Downs	
Dealer Hits Soft 17	
Surrender Allowed	
Insurance Allowed	
Shoe	**Ctl+H**
Shuffle Accuracy	
Cut Accuracy	
Shuffle Iteration	
Shoe Size	

The **Edit Menu** includes three commands that enable you to modify the current set of game parameters.   Each command invokes their respective dialog box enabling the modifications.   The changes may be saved to disk using the **Save** command under the Game Menu.

Edit Menu
  Advice

The **Advice** command initiates the **Advice Parameters** dialog box.   This dialog box enables you to alter what the **Advice Box** displays in its window .   The Advice Parameters dialog box's primary components are the **Advice Tables** and the **Count Advice** button.   Even though the main purpose of this dialog box is to alter what the Advice Box displays, it also serves as your reference for learning the appropriate actions in the various circumstances.

Edit Menu
   Advice
      Advice Tables

The **Advice Tables** enable you to alter what is displayed in the **<u>Advice Box</u>**.   For instance, if the **Hard Hit Table** says to hit in a particular situation (the box is checked), then the Advice Box will instruct you to "Hit".   Even though these tables are user defined, it is highly recommended that they conform to the tables defined by **<u>The Basic Strategy</u>**.   The rows are dependent on your hand whereas the columns are dependent upon on the dealer's up card.   For example, say that you're looking at the Hard Hit Table.   The situation is such that you have a 10 and a 9 (a hard 19) and the dealer is showing a Queen (10).   Now, look where the "19" row intersects the "10" column; if the box is checked, then you should hit and if it isn't, then stand. Remember that these tables are user defined so it is indeterminate whether the box is checked or not.   However, it certainly should *not* be checked since it would be absurd to hit a hard 19!

As a final note, the advice in the **Advice Box** is always given in accordance with the rules of the table.   The **<u>Rules of the Table</u>** dialog box can be accessed through the Rules command under the Edit Menu.   For instance, say that you have a 5 and an Ace (a Soft 16) and the dealer is showing a 6.   Furthermore the **Soft Double Down Table** instructs you to indeed double down in this situation (the box is checked).   The Advice Box will only display "Double Down" if a 16 is an **<u>Allowable Double Down</u>**.

Edit Menu
Advice
Count Advice

The **Count Advice** button initiates the **Count Advice Parameters** dialog box that enables you to further modify what is displayed within the **Advice Box**.   However, this enhanced advice will only be seen in the Advice Box if the **Card Count** box is checked in the Advice Box.   Take note that the advice in the **Count Advice Parameters** dialog box is user defined; yet, it should be defined in accordance to a tried and true strategy such as the   **Simple Count**.

The **Count Advice Parameters** dialog box contains two types of editable advice, the *card count* **Advice Tables** and the **Betting Advice** edit boxes.   It also contains the **Use Adjusted Count** check box as well as the   **Card Values** button.

Edit Menu
   Advice
      Count Advice
         Advice Tables

The *card count* **Advice Tables** are extensions to the *regular* **Advice Tables** in that they override the regular Advice Tables based upon the current card count.   For instance, say that the **Card Count** box is checked in the **Advice Box**.   Furthermore, the current card count is 10 (for instance); also, you are holding a hard 16 against a dealer Queen.   Suppose that the *regular* **Hard Hit Table** instructs you to hit on 16 against a 10 (the box is checked).   Also, the *card count* **Hard Hit Table** says to hit only when the count is < 1.   In this scenario, the Advice Box will instruct you to "Stand".   See, the *card count* **Hard Hit Table** overrode the *regular* **Hard Hit Table** since the card count was not less than 1.

 As a final note, the entries on the card count **Advice Tables** may be left blank.   If this is the case, then there is no override and the advice will be based solely on the regular **Advice Tables**.

Edit Menu
   Advice
      Count Advice
        Card Values

The **Card Values** button initiates the **Card Values** dialog box.   This box specifies the card count value of each card.   For instance, if you are adhering to the **<u>Simple Count</u>**, then the value associated with cards 2 - 7 is one, the value of 8 and 9 is zero, the value of ten cards is minus one, and Aces are valued at minus two.

However, if you plan on experimenting with the **<u>Complex Count</u>**, then you will need to modify the card's values in accordance with this superior game strategy.   That is, the 2 and 3 cards are associated with two, 4 is associated with two and a half, and so forth...

Or, you can test your own strategy.   For instance, many people feel that an Ace should *not* take on the value of such a large negative number (-2 or -3).   See, large cards assume negative values; yet, Aces can also assume a small card.   With this in mind, you can set an Ace at 0 or 1 (for instance) and then test your strategy by running the simulation a few thousand times.

Edit Menu
   Advice
      Count Advice
         Use Adjusted Count

The **Use Adjusted Count** box determines whether the card count is adjusted with respect to the cards remaining in the shoe.   If this box is checked, then the **Advice Box** will specify that the count is adjusted.   And, since game simulation runs off the advice given in the Advice Box, simulated play will also utilize the adjusted card count.

The adjusted count is calculated by multiplying the count by 100 and then dividing it by number   of cards remaining in the shoe.   That is:

Adjusted   **Count** *times* **100**
  Count   **=** **--**
                  number of cards remaining in shoe

As we have seen before, a large count is beneficial to you; furthermore, a large count is even more beneficial to you if you know that there are just a few cards remaining in the shoe.   Hence, the purpose of adjusting the count.   See, when the shoe is fresh, the count does not fluctuate rapidly since the number of cards remaining in the shoe (the denominator) is large.   However, when there are just a few cards remaining in the shoe, the count is magnified either in the positive *or* the negative direction.   This is due to the fact that the denominator (the number of cards remaining in the shoe) becomes small.

The Simple Count does not mandate the use of an adjusted count.   Nonetheless, it certainly can be used to improve the   strategy.   If you do use an adjusted count with the Simple Count, then you should edit   the values contained in the advice edit boxes to capitalize on the modified count.   Generally speaking, the new advice will be a hybrid between the Simple Count advice and Complex Count advice.

The Complex Count, on the other hand,   *requires* you to adjust the count .   So, if you plan on experimenting with the Complex Count, make certain that the **Use Adjusted Count** check box is indeed checked.

Edit Menu
   Advice
      Count Advice
         Betting Advice

To be an affective player, you need to fluctuate your bet according to the card count. Generally speaking, you should increase your bet as the count rises.   For example, say that the **Betting Advice** instructs you to bet 2 units when the count is >4.   Also, suppose that the shoe has just been shuffled and that you place a bet of $5.00.   This initial bet becomes your base bet and is considered to be 1 unit.   Now, you should maintain betting 1 unit ($5.00) until the card count is greater than 4.   Once the card count surpasses 4, then you should bet 2 Units ($10.00).   Again, a unit is based upon your first bet on a fresh shoe.   Each time that the shoe is shuffled, you have the opportunity to alter what is considered to be 1 unit by simply altering you initial bet.

When you take insurance, you are insuring against a dealer blackjack.   Remember, you can only insure when the dealer is showing an Ace.   So basically you insuring against a hole card of 10.   Hence, you should take insurance only if there is an excess of ten cards (a high card count).   Now, say that the **Betting Advice** instructs you to take insurance only when the count is > 5.   Simply stated, this says to take insurance only when the card count is greater than 5 and refuse the insurance if it is 4 or less.
is checked!

Edit Menu
    Rules

The **Rules** command initiates the **Rules of the Table** dialog box.   Simply stated, this dialog box enables you to modify the rules of the table.   The rules of the table consist of the, **Allowable Splits**, **Allowable Double Downs**, **Dealer Hits Soft 17**, **Surrender Allowed**, **Insurance Allowed**.

The set of check boxes named **Allowable Splits** specify which hands may be split. All of the available choices consist of a hands that contain two, and only two, cards of the same face value.   Virtually all casinos will permit you to split any hand consisting of two cards of the same value.

The **A,A : 1 Card Each** check box specifies how split Aces are dealt with.   If this box is checked and you split two Aces, then each split Ace will receive one, and only one, card.   Of course, you want those cards to be 10's (to make 21's).   Yet, they may not be 10's; hence, it is to *your* advantage to make the decision to stand (or continue) *after* the card is dealt to a split Ace.   Unfortunately, more and more casinos are requiring their guests to abide by this annoying rule.

The **Maximum Splits** edit box specifies how many times you can repetitively split. Keep in mind, that you are still restricted to splitting in accordance to the fore mentioned Allowable Splits.   For example, say you split two Aces and the first card dealt to one of the split hands is also an Ace.   In this case, you may split again if you have not exceeded the Maximum Splits.

The set of check boxes named **Allowable Double Downs** specify the hands that you can double down.   Most casinos permit you to double down only on ten's and eleven's.   Yet, some will also permit you to double down on eight's and nine's.   Very few will permit double downs on any hand.

Simply, if the **Dealer Hits on Soft 17** boolean is set, then he will hit on a soft 17. For example, the dealer must hit a 6 and an Ace when this boolean is set.   Generally, most casinos force the dealer to hit a soft 17; however, it is to the player's advantage if the dealer stands on a soft 17.

If the **Surrender Allowed** check box is set, then you may surrender immediately after the deal.   For example, if you have a 16 and the dealer has a 10 card showing, then you may want to surrender the hand and take back exactly one half of your bet Generally, most casinos do not allow surrender; however, it is to the player's advantage if it is offered.

If the **Insurance Allowed** check box is set, then you may insure against a dealer blackjack.   You can only insure immediately after the deal and if the dealer's up card is an Ace.   Generally, most casinos offer insurance.

Edit Menu
   Shoe

The **Shoe** command initiates the **Shoe Parameters** dialog box.   This dialog box enables you to modify the **Shuffle Accuracy**, **Cut Accuracy**, **Shuffle Iteration**, **Shoe Size**

The **Shuffle Accuracy** specifies how the dealer meshes cards together during a shuffle.   When the dealer shuffles, he first cuts the shoe into two sub-shoes.   Then, he meshes the two sub-decks back into one shoe.   If the Shuffle Accuracy is set to perfect, then the sequence of the resulting shoe will be 1,2,1,2,1,2,1,2,1,2,1..., where 1 represents a card from one sub-shoe and 2 represents a card from the other.   It is recommended that the Shuffle Accuracy be set to less than perfect to promote better randomness of the shuffle.

The **Cut Accuracy** specifies how the dealer cuts the shoe into two sub-shoes prior to shuffling.   If the Cut Accuracy is set to perfect, then the shoe is divided exactly in half.   It is recommended that the Cut Accuracy be set to less than perfect to promote better randomness of the shuffle.

The **Shuffle Iteration** specifies how many times the dealer shuffles the shoe between rounds.   It is recommended that the Shuffle Iteration be set to at least two. This promotes better shoe randomness.

The **Shoe Size** specifies how many decks make up a shoe.   Shoe sizes can range from a single deck to a maximum of six decks.   In general, a smaller shoe favors the player; however, constantly stopping to split the shoe can be annoying.

View Menu
File Toolbar
Options Toolbar
Actions Toolbar
Status Bar

The **View Menu** includes commands that enable you to display the application's additional visual aides.   The detachable toolbars are located at the top of the window, directly below the Menu bar.   Incidentally, each of the three toolbars can be detached by simply dragging the bar from the top.   Further, each of the bars can be docked on either side of the window.   The Status Bar is located at the bottom of the window.

Checking the **File Toolbar** command will display the first detachable toolbar.

Checking the **Options Toolbar** command will display the second detachable toolbar.

Checking the **Actions Toolbar** command will display the third detachable toolbar.

Checking the **Status Bar** command displays the Status Bar that is at the bottom of the main window.   Keeping the Status Bar open is optional since the information it provides is not crucial to the game.

Options Menu   **Hot Key(s)**

   <u>**Surrender**</u>   **U**

      <u>**Split**</u>   **P**

      <u>**Double Down**</u>   **B**

      <u>**Insure**</u>   **I**

The **Options Menu** includes four commands that enable you execute the various blackjack options.   All of these options are provided on the Options Toolbar to speed game play.

The **Surrender** command forfeits the current hand in exchange for one half of your initial bet.   This is useful when you've been dealt a *stiff hand* (12 - 16) and the dealer holds a *pat card* (a 7 or more).   For example, if you have a 16 and the dealer has a 10 card showing, then you may want to surrender the hand and take back exactly one half of your bet.   After all, losing half your bet is better than all of your bet!

The **Split** command splits the current hand forming two separate hands.   The hand must consist of two, and only two, cards that have the *same* face value.   A bet equal to the initial bet is then placed on the new hand.   You can also repetitively split.   For example, say you split two Aces and the first card dealt to one of the split hands is also an Ace.   In this case, you may split again!

The **Double Down** command doubles the initial bet.   However, the dealer requires you to draw one, and only one, card after doubling down.   For example, say you have a 7 & 4 (a hard 11) and the dealer's up card is a 6.   You may want to double down in this situation hoping that the next card dealt is a 10 (or the dealer busts).   Since the situation is in your favor, why not double the bet and win twice as much!

The **Insurance** command allows you to insure against a dealer blackjack.   You can only insure immediately after the deal and if the dealer's up card is an Ace.   Taking insurance costs exactly one half of your initial bet but pays two to one if the dealer does indeed have blackjack.

Successfully taking insurance when you *do not* have blackjack results in keeping your bet.   You lose your initial bet but because insurance pays two to one, the net result appears as if you retain your bet.

Taking insurance when you *do* have blackjack results in doubling your initial bet.   If the dealer has blackjack, then you push the dealer, insurance pays two to one, but the cost of insurance is deducted from the winnings.   The net result is doubling your bet.   On the other hand, if the dealer does not have blackjack, then your initial bet gets paid three to two, the insurance does not get paid off, but the cost of insurance is still deducted from the winnings.   The net result is doubling your bet.   Hence, taking insurance when you have blackjack is the same as winning even money.

Actions Menu		Hot Key(s)
Bet		
Bet $1		**1**
Bet $5		**5**
Bet $25		**2**
Last Bet		**L** *or* **Space Bar**
Deal	**D**	
Hit		**H**
Stand	**S** *or*	**Right Mouse Click**

The **Actions Menu** contains commands which allow you to navigate through your game.   Thus, this is your mechanism to win gobs of dough.   From this menu you can make the decision to bet, deal, hit, and stand.

The **Bet $1** command allows you to wager a single dollar.   Still, if you have second thoughts about placing such a large wager, you can take back your bet by clicking on the *placed* bet.

The **Bet $5** command allows you to wager five bucks.   The bet can be taken back by clicking on the *placed* bet

The **Bet $25** command allows you to wager twenty-five bucks. If you have second thoughts about placing such a large wager, you can take back your bet by clicking on the placed bet.   As you can probably guess, this is the fastest way to get to the maximum bet of *$200*.

The **Last Bet** command allows you to wager whatever your last bet was.   This way you don't always have to be clicking on the chips!   This command is initiated either by hitting **L** or by hitting the **Space Bar**.   Keep in mind that this command *not only* places your last bet, it also initiates the dealing process.   Hence, you'll have no time to take back your bet once you've initiated the command!

The **Deal** command begins the round.   It's kind of like telling the dealer that you're ready to win some money.   After the cards are dealt, the dealer will wait for you to hit, stand, or try one of the special options.

The **Hit** command allows you to receive another card.   You'll need to use this when you've been dealt a *small* hand and need to get a bit closer to twenty-one.   But don't hit too many times!

The **Stand** command ceases play and passes control to the dealer.   He'll then draw cards to his hand, if appropriate, then settle up the bets.   This command is initiated either by hitting **S** or by hitting the **Right Mouse Click**.   Good luck!

Special Menu	Hot Key(s)
Advice Box	**Ctl+V**
Card Count	
Enforce.	
Simulation Box	**Ctl+M**
Initial Amount	
Final Amount	
Rounds Dealt	
Rounds to Deal	
Base Bet	
Display	

The **Special Menu** contains the **Advice Box** and **Simulation Box** commands.   The Advice Box issues action recommendations based upon the current table scenario. The Simulation Box   provides for rapid automated play based upon the Advice Box.

Special Menu
   Advice Box

The **Advice Box** command on the Special Menu displays the **Advice Box** dialog. The advice is dependent on the current cards on the table and is in the format of "Hit", "Stand", "Double Down", and so forth.   The advice is established by the user defined Advice Tables accessible through the **Advice** command on the Edit Menu.

The **Advice Box** contains the **Card Count** and the   **Enforce** check boxes.   The state of these commands are retained even after the Advice Box has been closed. For instance, if the Card Count command is checked upon closing the Advice Box, then it will be checked upon re-opening the box.   Likewise, the Enforce command operates in the same fashion.

The **Card Count** check box in the **Advice Box** enhances the advice format in the box by utilizing the card count.   The first line in the window displays the advice based upon the card count and the second line displays the current card count. Keep in mind that the states of these check boxes are retained even after closing the Advice Box.   This is significant if you plan on using the **Simulation Box**.   See, simulated play runs off of the advice given in the Advice Box.   Hence, the state of the Card Count check box is significant even after the box closes.

The **Enforce** check box *requires* you to take the action that the **Advice Box** suggests.   If you attempt to defy the advice then a beep will sound and the action will *not* be executed.   This can be very helpful as a learning tool since you will not be able to make a wrong action.   Furthermore, the enforcement continues even after the box has been closed.   This can also be useful if you want to play the game without the assistance of the Advice Box but still want to be sure you don't make an ill advised action.

Special Menu
    Simulation Box

The **Simulation Box** is a dialog box that enables you to simulate game play. Simulating game play entails automating actions such that you have no control of whether to hit, stand, double down, etc.   However, each decision is made in accordance to what the **Advice Box** displays.   But remember, the Advice Box depends on the user defined advice accessible through the **Advice** command on the Advice Menu.   Now, if you run the simulation for long runs, what you are actually doing is validating whether the current advice is sound or not.   This enables you to skillfully tailor the advice to your satisfaction!

The items contained in the Simulation Box include the **Initial Amount**, the **Final Amount**, and the **Rounds Dealt**.   It also contains the **Rounds to Deal**, the **Base Bet** edit boxes as well as the **Display** check box.

The **Initial Amount** displays your worth prior to starting the automated simulation.

The **Final Amount** displays your worth after the automated simulation has ended.

The **Rounds Dealt** displays how many rounds that have been automatically dealt. This is updated as the simulation runs.

The **Rounds to Deal** edit box allows you to define how many rounds the simulation will deal.   The maximum amount of rounds is 99,999.

The **Base Bet** edit box allows you to define the amount bet each round.   If the **<u>Card Count</u>** check box in the **Advice Box** has been checked, then the bet will be varied as defined by the **<u>Betting Advice</u>**.   However, if it has not been checked, then the bet will remain constant.

Keep in mind that   this variable only comes into play *on* the first bet *on* a fresh shoe. See,   all of the remaining bets are based on the first bet, the base bet (1 unit).   With this in mind, a change of   this variable will *not* affect the recommended bet until the shoe runs out and is shuffled again.

The **Display** check box allows you to specify whether the actions are shown or if the actions are hidden.   Displaying the actions allows you to watch how the game is transpiring.   However, suppressing the display allows for rapid simulation.

Playing the Game

  The purpose of the game is to get to twenty one.   You play successive rounds against the house (the dealer).   And, at the end of each round, the winner is the one who is closest without going over twenty one.   You may request as many cards as you wish provided that you do not exceed twenty one.   After you have received all the cards that you wish, you stand and the dealer takes over.   The dealer must draw additional cards until he has seventeen or higher.   The player gets paid off at two to one if he wins.   That is, the player wins two units for every one unit that is bet.   However, he forfeits his bet if he loses.

  Cards 2 through 10 have a value equal to their face value.   Face cards have a value of 10.   Aces count as either 1 or 11.   Since Aces can represent two values, it is possible for a hand to have two values.   For instance, a six and an Ace can either be 7 or 17; this is referred to as a 'soft 17'.   A hard hand has only one possible value. For instance, a seven and a ten is a 'hard' 17.

  The first thing to do when you sit down at the blackjack table is to place an initial bet.   Click on a chip to place the bet.   After the bet is made, click on the shoe and the dealer will deal two cards to you and two cards to himself.   You are only allowed to see one of the dealer's cards.   Next, you have to decide if you want to hit; that is, if you want another card.   Click on your hand to hit your hand.   If you are satisfied with what you have, then stand by clicking on the dealer's hand.   The dealer draws the appropriate cards for himself and then settles the wagers.   Click on a chip to start the cycle over again.

The Basic Strategy

The Basic Strategy is a superior playing strategy that was developed by Edward O. Thorp.   The strategy uses statistical analysis to determine appropriate actions.   This method is very mechanical since the advice is only contingent upon the dealer's up card and the value of your hand.   This advice can be concisely condensed into a series of tables.   The following table describes the appropriate hits when you're holding a *hard hand* against a dealer's up card.   Remember, a hard hand contains no Aces that are assuming the value of 11.   For instance, a 10 and a 7 is a *hard 17*; likewise, a 10, 6, and an Ace is also a *hard 17*.   In both cases there are no Aces assuming the value of 11.

Hard Hit Table

Dealer's Up Card

Player's Hand	2	3	4	5	6	7	8	9	10	A
19										
18										
17										
16						H	H	H	H	H
15						H	H	H	H	H
14						H	H	H	H	H
13						H	H	H	H	H
12	H	H				H	H	H	H	H
11	H	H	H	H	H	H	H	H	H	H
10	H	H	H	H	H	H	H	H	H	H

So, if you're holding a hard hand with the value of 11 (or less), then the table says to hit regardless of what the dealer's up card is.   However, if you're holding a hard 16 against a dealer's 6, then the table says to stand.

If you are holding a *soft hand*, then the advice becomes very straight forward as described by the following table.   Remember, a soft hand contains an Ace that is assuming the value of 11.   For instance, a hand consisting of a 6 and an Ace is referred to as a soft 17 (or hard 7).   The following table describes the appropriate hits when you're holding such a hand.

Soft Hit Table

Dealer's Up Card

Player's Hand	2	3	4	5	6	7	8	9	10	A
19										
18								H	H	H
17	H	H	H	H	H	H	H	H	H	H
16	H	H	H	H	H	H	H	H	H	H
15	H	H	H	H	H	H	H	H	H	H
14	H	H	H	H	H	H	H	H	H	H
13	H	H	H	H	H	H	H	H	H	H
12	H	H	H	H	H	H	H	H	H	H
11	H	H	H	H	H	H	H	H	H	H
10	H	H	H	H	H	H	H	H	H	H

So, if you're holding a soft hand with the value of 17 (or less), then the table says to hit regardless of what the dealer's up card is.   Likewise, if you're holding a soft 18 against a dealer's 9, 10, or Ace, then the table says to hit.   You should stand on soft 19's and higher simply because these are rather good hands.

Advice tables can also be used to specify when to *double down* on *hard hands*.   Remember, doubling down entails doubling your bet and then receiving one, and only one, card.   The following table describes the appropriate conditions when you should double down.

Hard Double Down Table

Dealer's Up Card

Player's Hand	2	3	4	5	6	7	8	9	10	A
14										
13										
12										
11	D	D	D	D	D	D	D	D	D	
10	D	D	D	D	D	D	D			
9		D	D	D	D					
8										
7										
6										
5										

The best time to double down is when you're holding a 9, 10, or 11.   The reason for this is that there are quite a few 10 cards in a shoe and you're betting that you'll be dealt one of these 10 cards.   However, the table says to refrain from doubling down if the dealer himself is showing a high card.   After all, the dealer might have a 10 card as his hole card making for a hand that is difficult to beat.

There is also a table that describes when to double down on *soft hands*.   The following table describes the appropriate conditions when you should double down.

Soft Double Down Table

Dealer's Up Card

Player's Hand	2	3	4	5	6	7	8	9	10	A
19										
18		D	D	D	D					
17		D	D	D	D					
16			D	D	D					
15			D	D	D					
14				D	D					
13				D	D					
12										
11										
10										

Note that you should not double down on soft 10's or 11's.   In fact, there is no such animal! See,   the lowest soft hand is a soft 12 - an Ace and an Ace.   Also, you should not double down on any soft hand greater than 18.   The simple reasoning for this is that these are darn good hands to stand on.   When you double down on a soft hand, you're hoping that the next card is small; however, it is impossible to bust even if the next card happens to be large. Also note that the best time to double down on a soft hand is when the dealer is showing a stiff card (less than 7).   This is due to the fact that the dealer may easily bust; thus, making you the winner regardless of what your third card is.

The final table describes when to *split* a hand.   Remember that it is only possible to split if you are holding two cards of equal value.   For this reason the table is configured slightly different.   That is, the player's hand is signified by the exact cards you are holding.

Split Table

Dealer's Up Card

Player's Hand	2	3	4	5	6	7	8	9	10	A
A,A	S	S	S	S	S	S	S	S	S	S
10,10										
9,9	S	S	S	S	S		S	S		
8,8	S	S	S	S	S	S	S	S	S	S
7,7	S	S	S	S	S	S				
6,6		S	S	S	S					
5,5										
4,4										
3,3			S	S	S	S				
2,2			S	S	S	S				

As you can see, you should always split Aces since it is much better to hit the respective 11's than it is to hit a 12.   Likewise, always split 8's since it is better to hit the respective 8's than it is to hit a 16.   The table may look random; yet, each split makes sense if you give each circumstance a little thought.

The preceding tables assume that at least a four deck shoe is being used.   The advice tables do indeed differ slightly for shoes with less than four decks.   For instance, the following changes should be made to the preceding tables for a **two deck shoe:**

      Double down on a hard 9 against a 2
      Double down on a hard 11 against an Ace

A single deck shoe has quite a few more modifications to the preceding tables.   The following changes should be made to the preceding tables for a **single deck shoe:**

      Stand on a soft 18 against an Ace

      Double down on a hard 8 against a 5
      Double down on a hard 8 against a 6
      Double down on a hard 9 against a 2
      Double down on a hard 11 against an Ace

      Double down on a soft 13 against a 4
      Double down on a soft 14 against a 4
      Double down on a soft 17 against a 2

      Split a 2, 2 against a 3
      Split a 6, 6 against a 2

The Simple Count

The Basic Strategy provides statistically sound advice based upon the likelihood of what the next card will be.   However, as cards are dealt from the shoe, the odds that the next card will be a high card (or low card) fluctuate.   This is simply due to the fact that sometimes more high cards are dealt than low cards.   If you're keeping track of how many high cards (and in turn, low cards) have been dealt, then you can modify your game play to take advantage of the situation.   This is the core concept of **The Simple Count** which was first developed by Edward O. Thorp.

The goal of card counting is to determine if there is an excess of low or high cards remaining in the shoe.   To do this, you certainly wouldn't have to count every 2, 3, 4, and so on.   That would be far too complicated and confusing.   Just use the simple scheme of associating a value to each card.   Then, as you see the various cards dealt from the shoe, you add the associated values to the running card count.   Here is the association table:

The card count starts at 0.   Then for every card that becomes visible, the associated card value is added to the running card count.   Now, there is an excess of large cards remaining in the shoe if the card count grows in the positive direction.   This is because more small cards with a value of 1 have been dealt and counted.   On the other hand, there will be an excess of small cards remaining in the shoe if the count grows in a negative direction. Again, this is because more large cards with a value of -1 or -2 have been dealt and counted.

A large positive card count is definitely most beneficial to you.   See, the dealer must always hit if he has less than 17; even if there is a large positive card count.   You, on the other hand, have the prerogative to stand on a hand less than 17 knowing that the next card dealt has a high probability of being a ten card.   Since you have the advantage on a high card count, you'll want to increase your bet as the card count rises.   The table of betting contingencies follows.

Bet Contingencies				
	1 deck shoe	2 deck shoe	3 deck shoe	4+ deck shoe
Bet 2 units if count is	2 - 3	4 - 7	6 - 11	8 - 15
Bet 3 units if count is	4 - 5	8 - 11	12 - 17	16 - 23
Bet 4 units if count is	6 - 7	12 - 15	18 - 23	24 - 31
Bet 5 units if count is	8 - 9	16 - 19	24 - 29	32 - 39

For instance, if the shoe contains 4 decks and the card count is less than 8, then you should maintain your base bet of 1 unit.   That is, if your initial bet is $5.00, then your base bet is $5.00 and you should stick to betting only $5.00.   On the other   hand, if the card count rises to 16, then you should up your bet to 2 units ($10.00).   Continuing, if the card count rises to 24, then you should up your bet to 3 units ($15.00).   As you can see, fluctuations in

the card count on smaller shoes will rapidly affect the bet you should wager.   Hence, if you know the current card count,   then you can capitalize on the situation based upon this knowledge.   This is another benefit of smaller shoe sizes.

Since the Basic Strategy is based on the odds of the next card dealt, the strategy should be modified when you have a better idea of what the next card will be.   With this in mind, you need to make the following changes to the Basic Strategy with regard to the current card count.

Stand on a hard 16 against a 7 or more when the card count is > 0
Stand on a hard 15 against a 7 or more when the card count is > 3
Stand on a hard 14 against a 7 or more when the card count is > 7
Stand on a hard 13 against a 7 or more when the card count is > 11
Stand on a hard 12 against a 7 or more when the card count is > 15

Stand on a hard 12 against a 2 when the card count is > 3
Stand on a hard 12 against a 3 when the card count is > 1

Double down on a hard 11 against an Ace when the card count is > -2
Double down on a hard 11 against a 10 when the card count is > -5
Double down on a hard 11 against a   9 when the card count is > -5

Double down on a hard 10 against a 11 when the card count is > 3
Double down on a hard 10 against a 10 when the card count is > 3

Double down a on hard 9 against a 7 when the card count is >   3
Double down a on hard 9 against a 2 when the card count is > -1

Double down a on hard 8 against a 5 when the card count is > 2
Double down a on hard 8 against a 6 when the card count is > 2

Split a 10,10 against a 4 when the card count is > 5
Split a 10,10 against a 5 when the card count is > 3
Split a 10,10 against a 6 when the card count is > 4

Finally, taking insurance should be discussed.   Some people think that insurance should be taken only when you have a good hand.   This is far from the truth. Remember, insurance is offered when the dealer has an Ace showing; so, you are insuring against a dealer blackjack.   That is, you are insuring against the dealer having a 10 as a hole card.   Now, If you know the card count, then you have a good idea what the next card will be.   Hence, taking insurance is only contingent upon the card count.   With this in mind, use the following table of insurance contingencies to determine when you should take insurance.

Insurance Contingencies			
	1 deck shoe	2 deck shoe	3 deck shoe	4+ deck shoe
Insure if count is	> 2	> 5	> 8	> 11

For instance, if the shoe contains 4 decks and the card count is greater than 11, then you should take insurance; otherwise, refuse insurance.   This means that you will usually refuse insurance.

The Complex Count

Just like the Simple Count improves upon the Basic Strategy, **The Complex Count** improves upon the Simple Count.   A player using this technique makes for a *very* successful player.   Unfortunately, this technique is somewhat difficult to master. With this in mind, it is strongly suggested that you first learn the Simple Count before studying the Complex Count.

The Complex Count works upon the same principle as the Simple Count in that it keeps track of the low and high cards dealt through the mechanism of a single number.   Furthermore, this single number, the *count*, is calculated in the same manner - by associating a value with each card, and then adding the associated values as the cards become visible.   However, the Complex Count associates different values to the cards.   Here is the association table:

Card Values

2 = 2	7 = 1½
3 = 2	8 = 0
4 = 2½	9 = -½
5 = 3½	10 = -2½
6 = 2	A = -3

As you can see, these values are somewhat more difficult to memorize than those from the Simple Count.   Now, you can think of the running sum of the card values as the complex count.   However, the *adjusted complex count* is used for all pertinent decisions.   Here is the formula for computing the adjusted complex count:

$$\text{Adjusted Complex Count} = \frac{\text{Count } times \text{ 100}}{\text{number of cards remaining in shoe}}$$

The adjusted complex count is then used to determine your bet.   Since the shoe size is accounted for in the computing of the adjusted complex count, the bet contingencies need not take the shoe size into account.   With this in mind, use the following table to determine your bet.

Bet Contingencies

Bet 2 units if count is	5 - 8	
Bet 3 units if count is	9 - 12	{ adjusted complex count }
Bet 4 units if count is	13 - 16	
Bet 5 units if count is	17 - 20	

After the bet has been made and the cards have been dealt, you'll need to use the adjusted complex count to direct your game play.   The tables are very similar to the Basic Strategy tables.

Hard Hit Table

Dealer's Up Card

Player's Hand	2	3	4	5	6	7	8	9	10	A
19										
18										
17										
16						<45	<40	<25	<1	<40
15						H	H	<50	<20	<50
14	<-15	<-25	<-35			H	H	H	<40	H
13	<0	<-10	<-15	<-25	<-20	H	H	H	H	H
12	<15	<7	<1	<-10	<-7	H	H	H	H	H
11	H	H	H	H	H	H	H	H	H	H
10	H	H	H	H	H	H	H	H	H	H

So, if there is an 'H' in the box, then you should hit. However, if there is a number in the box, then you should hit only if the adjusted complex count is *less than* the number (stand otherwise). For readability, the positive numbers are colored blue whereas the negative numbers are colored red.

Soft Hit Table

Dealer's Up Card

Player's Hand	2	3	4	5	6	7	8	9	10	A
19										
18								H	>15	>2
17	H	H	H	H	H	H	H	H	H	H
16	H	H	H	H	H	H	H	H	H	H
15	H	H	H	H	H	H	H	H	H	H
14	H	H	H	H	H	H	H	H	H	H
13	H	H	H	H	H	H	H	H	H	H
12	H	H	H	H	H	H	H	H	H	H
11	H	H	H	H	H	H	H	H	H	H
10	H	H	H	H	H	H	H	H	H	H

The Soft Hit Table is virtually the same as the Basic Strategy. However, hit a soft 18 against a 10 if the adjusted complex count is *greater than* 15. Likewise, hit a soft 18 against an Ace if the count is *greater than* 2.

Hard Double Down Table

Dealer's Up Card

Player's Hand	2	3	4	5	6	7	8	9	10	A
14										
13										
12										
11	D	D	D	D	D	D	>-30	>-20	>-20	>4
10	D	D	D	D	D	D	>-20	>-10	>20	>20
9	>5	>-5	>-15	>-20	>-30	>16				
8		>45	>30	>15	>10					
7				>50	>50					
6										
5										

Soft Double Down Table

Dealer's Up Card

Player's Hand	2	3	4	5	6	7	8	9	10	A
19		>25	>15	>10	>5					
18		>-1	D	D	D					
17	>1	>-10	>-25	D	D					
16		>20	>-5	D	D					
15		>30	>-5	D	D					
14		>30	>2	>-10	>-30					
13		>30	>3	>-5	>-15					
12										
11										
10										

So, double down if the box contains a 'D'.   However, if there is a number in the box, then only double down if the adjusted complex count is *greater than* the number in the box. Again, the different colors are merely for the readability of positive and negative numbers.

Split Table

Dealer's Up Card

Player's Hand	2	3	4	5	6	7	8	9	10	A
A,A	S	S	S	S	S	S	S	S	S	S
10,10			>40	>30	>20	>20				
9,9	>-7	>-15	>-20	>-25	>-25	>30	S	S		>30
8,8	S	S	S	S	S	S	S	S	>30	S
7,7	S	S	S	S	S	S				
6,6	>10	>0	>-15	>-25	>-25					
5,5										
4,4										
3,3			>20	>-5	S	S				
2,2			>10	>-5	S	S				

Like the previous tables, Split if there is a 'S' in the box.   However, if there is a number in the box, then only split your hand if adjusted complex count is greater than then number in the box.

As far as insurance goes, you should insure only if the adjusted complex count is *greater than* 7.