Sir Arthur

Joust or Battle Sir Arthur, two games of skill based on the Knight in chess, play against the computer or a friend. Also try the solitaire games of the knights tour and Sir Arthur's tour, solve these and enter our competition.

The Knights Tour.

The Sir Arthur's Tour.

Joust Sir Arthur.

Battle Sir Arthur.

How to Play, the Menus and Toolbars.

Now you have learnt how to play Sir Arthur you must check out the The Competition.

Sir Arthur's Tour

Sir Arthur's tour is similar to the knights tour with an additional constraint. Using a knight chess peace place it anywhere on the board and then move around the board visiting as many squares as possible once only and not crossing the path of any earlier move.

If you have never played chess and do not know how a knight moves around a chess board press here.

To see how this works here is an example of a Sir Arthur' tour on a 6 x 6 board. Starting in the top left hand corner a total of 13 moves are managed before the knight cannot be moved without visiting a squaure already visited or crossing the path of a previous move.
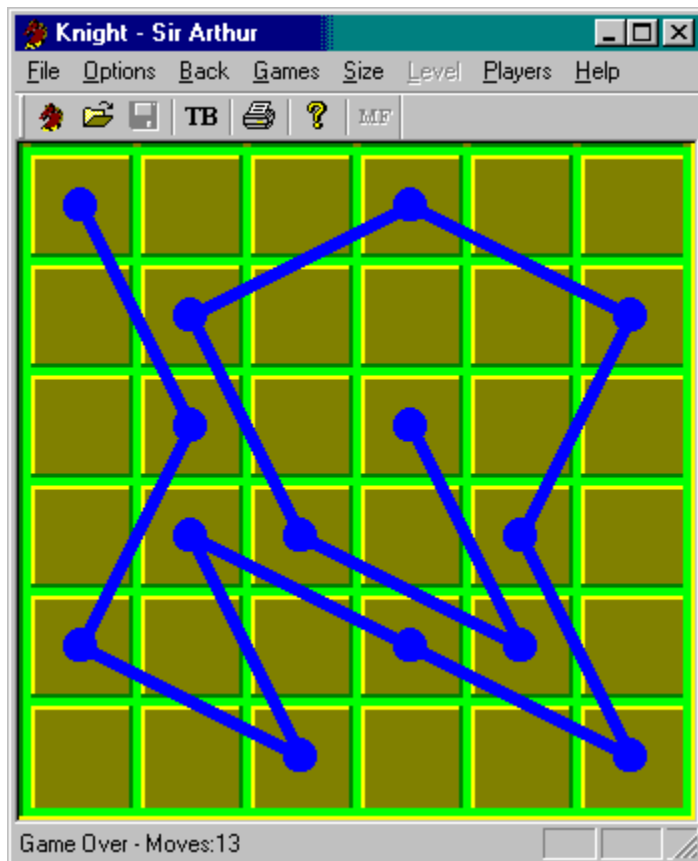
For a 6 x 6 board (as shown) the maximum number of moves possible before becoming stuck is 17. You should be able to find the maximum for a 4 x 4 board very easily (it is 5) and for a 5 x 5 board it is 10 which should not be difficult to find either. The 6 x 6 solution is hard to find and for an 8 x 8 the maximum is 35 which is very hard to find. We have not verified the maximum number of moves for Sir Arthur's tour for larger board sizes and will be running competitions to find these longest solutions.

Sir Arthur's tour is a known puzzle, we do not know if it has a name and so we have named it Sir Arthur' tour.

Battle Sir Arthur

Another   completely new game to play. Imagine two knights on the battle field, first one knight strikes a blow and then the other and they continue until one of the knights dies.

The game uses just one piece, the knight from chess, and each player takes it in turn to move the piece.   The knight can only be moved to a square that has not been visited this game. If a player cannot move then they die, that is the game is over and they have lost, the other player who moved the knight to this position wins.

Here is an example game, the Red knight moves first, they battle back and forth around the board until the Blue knight wins:
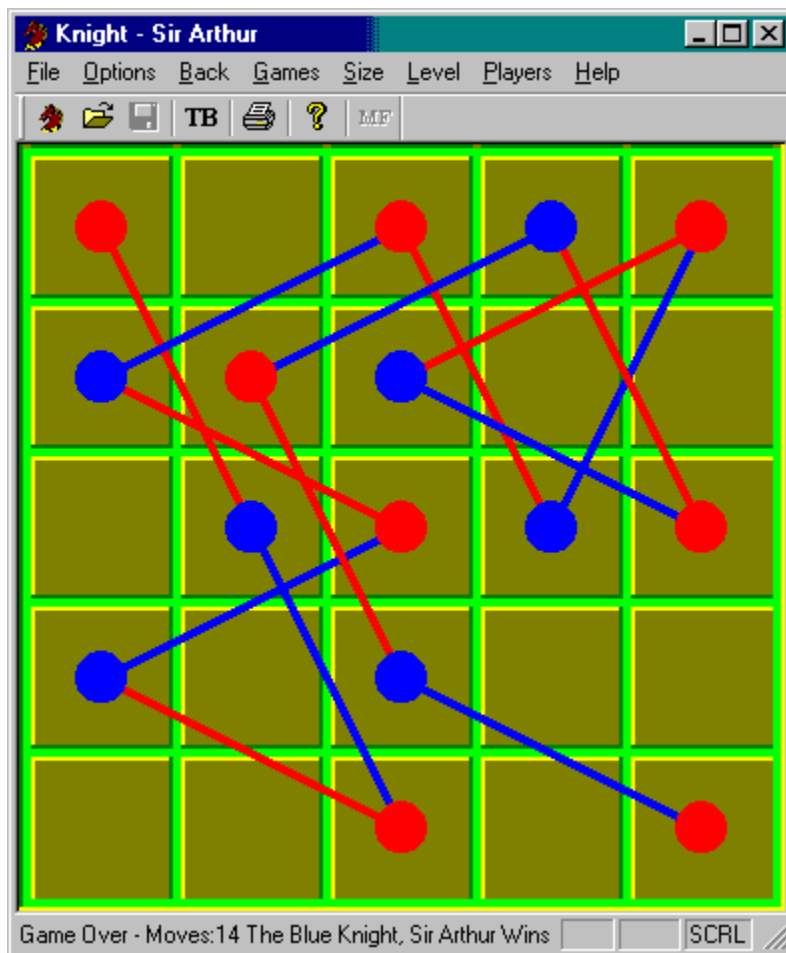
You can choose to play against Sir Arthur (the computer) by selecting to "Battle Against Sir Arthur" on the Games menu. Or battle a friend by selecting "Two Player Battle" from the Games menu. When playing Sir Arthur you can choose the level of skill Sir Arthur plays at, if you choose a high skill level on a large board size while running on a slow processor (less than

200mhz) then Sir Arthur will take a few seconds thinking about his next move.

This is a longer game than the Joust Sir Arthur, it takes more blows to kill, which game you prefer is up to you.

If you have never played chess and do not know how a knight moves around a chess board press here.

The Competition

We plan to run lots of competitions revolving around finding the longest solutions to the Knights tour and Sir Arthur's tour. A proportion of   the registration fee will used to fund the competition prizes, providing we continue to get new registered uses we hope to run a number of competitions over the next few years.

We will be announcing details of the first competition and how to enter in January 2000 on the Sir Arthur web page, this is www.bacsoftware.co.uk/sirarthur .

Only registered users will be able to enter the competition. Registering your copy of Sir Arthur before this date will not only make you eligible to enter the competition but may give you an advantage. This is because in the event of a tie the entry with the earliest registration date for their copy of SirArthur will win.

So register your copy of SirArthur now and pass the distribution file to a friend and get them to register to (but not until you have registered first and so will have the advantage of an earlier registration date) which will increase the size of the prize pool.

Joust Sir Arthur

A completely new game to play. Imagine two knights on the jousting field, first one knight strikes a blow and then the other and they continue until one of the knights yields.

The game uses just one piece, the knight from chess, and each player takes it in turn to move the piece.   The knight can only be moved to a square that has not been visited this game and must not cross the path of a previous move. If a player cannot move then they must yield, that is the game is over and they have lost, the other player who moved the knight to this position wins.

Here is an example game, the Red knight moves first but the Blue knight wins:
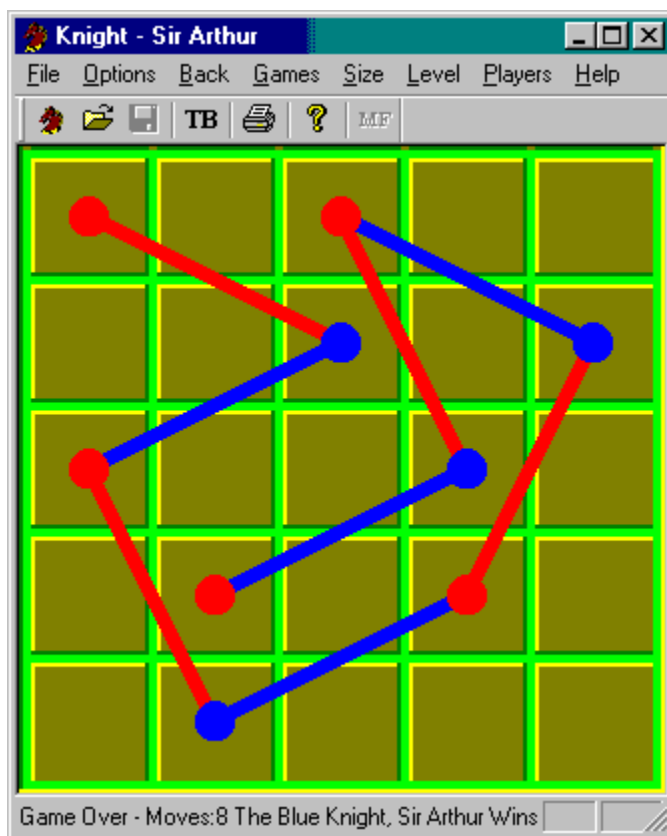
You can choose to play against Sir Arthur (the computer) or a friend. When playing Sir Arthur you can choose the level of skill Sir Arthur plays at, if you choose a high skill level on a large board size while running on a slow processor (less than 200mhz) then Sir Arthur will take a few seconds thinking about his next move.

On the small board sizes the game is over very quickly as there is little space to manoeuvre, it may be better to try the larger board sizes first with Sir Arthur set on a low skill level.

If you have never played chess and do not know how a knight moves around a chess board press

here.

The Knights Tour

The knights tour is a well known puzzle, particularly by chess players. Using a knight chess peace place it anywhere on the board and then move around the board visiting every square on the board once only.

If you have never played chess and do not know how a knight moves around a chess board press here.

 The problem with the traditional knights tour played on a chess board is knowing which squares you have visited. You can place the other chess peace's on the square you have visited, but there are not enough peace's. SirArthur solves this problem and also allows you to try it on different sized boards, not just the 8 x 8 chess board. Note it is not possible to solve the problem on a 4 x 4 board, it is possible on 5 x 5, 6 x 6 and 8 x 8 boards but at present we do not know for sure if solutions exit for board sizes greater than 8 x 8. It is likely that we will run a future competition to find a solution for one of these larger sized boards.
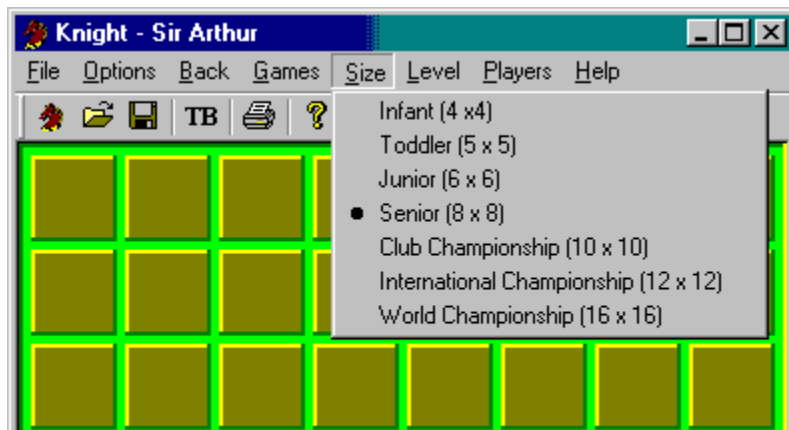
How To Play, the Menus and Toolbars

To Play a game, Select the game from the **Games Menu**:
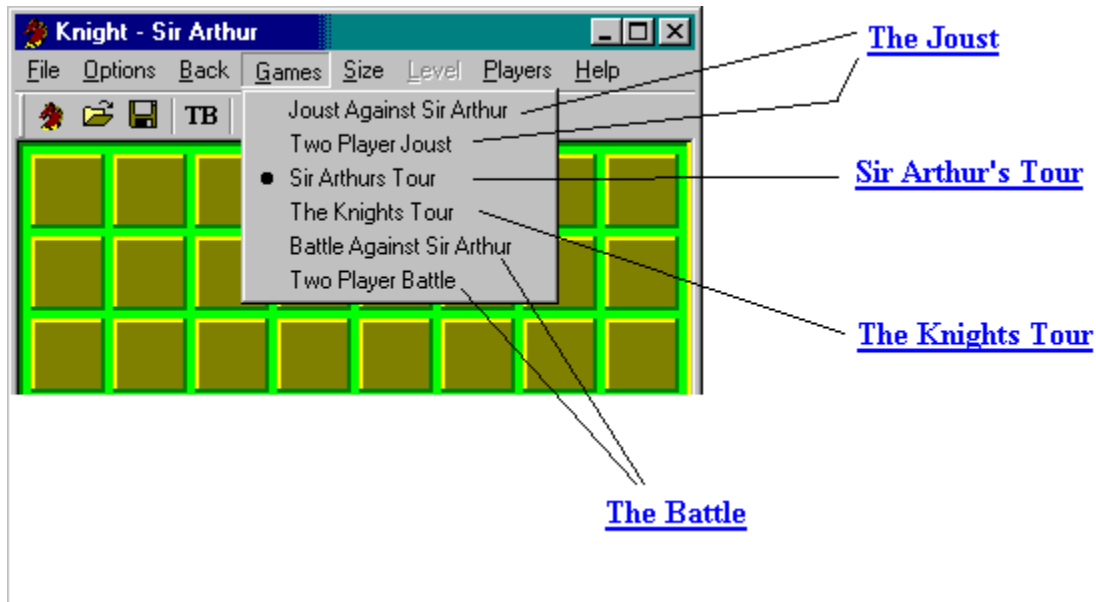
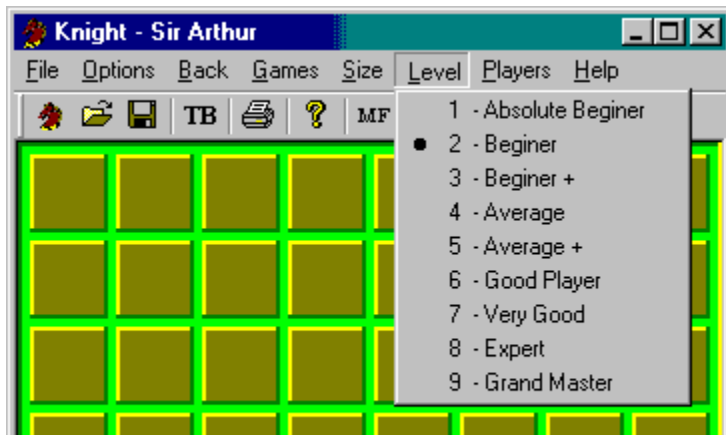The checked entry in this menu is the current game being played.

Now select the board size you wish to play on from the **Size Menu**:

The Checked entry is the current size selected. Note the smaller board sizes may make the games easier but the games may then be over very quickly because there are so few available moves.

If you have selected to "Joust Against Sir Arthur" or to "Battle Against Sir Arthur" then the

Level Menu becomes enabled and you can select the level of skill Sir Arthur plays at.

The Checked entry is the current level Sir Arthur is playing at, you can change the level at anytime in a game and the selected level becomes effective immediately.

From the **Players Menu** you can change the colour of a player (including Sir Arthur) and add a name to the player. This is done through a dialog box, as below:
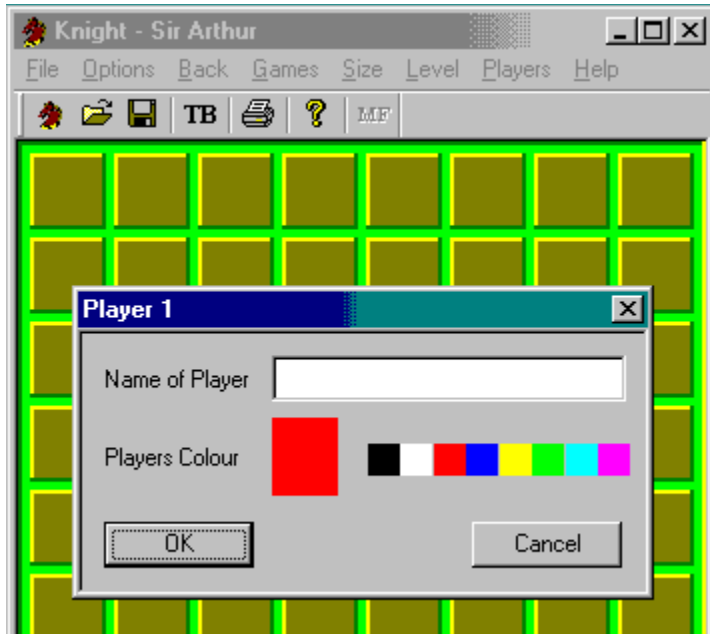

The **Back Menu** has just two entries, these allow you to take back one or two moves. Depending on which game you are playing either one or both will be enabled.

The first two entries in the **Options Menu** allow you to show or hide the tool bar and status bar.
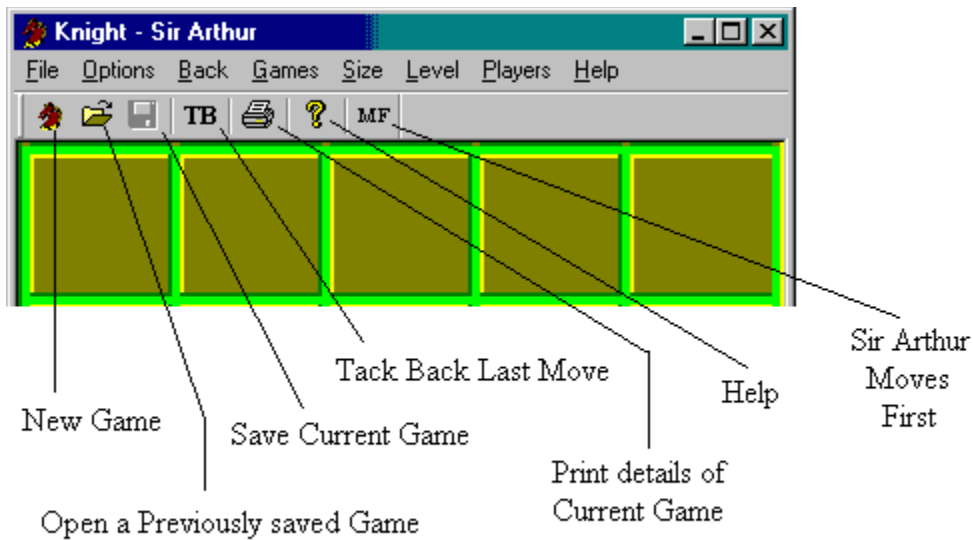

The third entry "End at Start" should only be used with Sir Arthur's Tour, it allows the final move to finish at the start point. If you use it in a Joust then this favours the second player as it is only possible to finish at the start on an even number of moves. The final option allows you to view a record of your longest tours for different size boards.

The **File Menu**
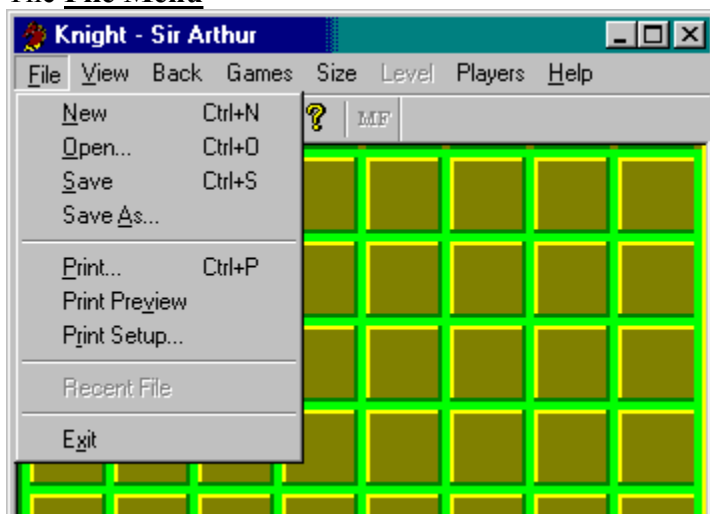
From this menu you can start a new game (New), restart a previously saved game, save a game (only enabled if program registered) if game in progress or complete and print the current position of game. In a printout of the game the moves are listed, a position on the board is shown as a letter and a number. Starting with the left column as "A" the next is "B" and so on moving right, The rows are numbered with the bottom row as 01 and the next as 02 etc. So A01 is the bottom left square and H08 is the top right square on a 8 x 8 board.

Finally the **Tool Bar** which consists mainly of short cuts to menu options:

Knight - Sir Arthur

File Options Back Games Size Level Players Help

New Game

Open a Previously saved Game

Save Current Game

Tack Back Last Move

Print details of Current Game

Help

Sir Arthur Moves First

The one unique item on this menu is the MF button, this is only enabled at the start of a game against Sir Arthur. Normally you select the start position and move first but press this button and Sir Arthur selects a start square and moves first. Sir Arthur selects a first at random which means on the smallest board size where the first move can determine the outcome of the game you may get an advantage.

How a Knight Moves

The chess peace the knight moves in a strange way, it moves either two squares sideways (left or right) and then one square up or down OR it moves one square sideways and then two squares up or down.

If you place a knight somewhere in the centre of a board (away from the edges) then there are eight possible places it can move to, and they are: