

(123-Learn is installed in this spreadsheet under "Alt-z")

This spreadsheet has 123-Learn installed for practice only, it is best to install 123-Learn according to the directions given in the documentation (retrieve "123LEARN.WK1" to view/print). Don't resave this file.

The macro described here is very advanced. It is to show 123-Learn at it's best, so don't get discouraged. If you know how to press keys, you know how to start using 123-Learn...

Assume you want to assign the price of the first "B" in the product column to the second "B". This macro is already made- invoke it using "Alt-z g", then call up the file again and try to recreate the macro by following these directions carefully...

Action:

position\*

Alt-znt

/c~{dn}

{left}\md

\mne~\mnl

"B"~{dn}

\mk\mie~

\d\dq

repos.\*

Alt-za

{right}~

\dq

\* These direct curser movement, they are not to be typed!

This will create a macro that will copy the \$5.00 to the next "B" in the column, regardless of where it occurs.

123-LEARN tutorial (continued from last page)

The macro you just made copies only the first B price to the second. Now append the macro to make it copy the second to the third, etc.

Action:

position\*

Alt-zga

{lft}{dn}

\md\mnl

"B"~{dn}  
\mk{right}  
\mlq

Now the macro will copy the first \$5.00 to the second occurrence of "B", and will then copy it to the third, then the third to the fourth, ect. On the following page is an explanation of why the macro works. If it doesn't work, try again making very sure you followed instructions. If still not, reinstall 123-Learn, if still not, contact Softsmith!  
BLOW BY BLOW COMMENTARY ON TUTORIAL MACRO:

Alt-znt

/c~{dn}  
{left}\md

\mne~\mnl

"B"~{dn}  
\mk  
\mie~\d\dq

repos.\*

Alt-za  
{right}~

\dq

Alt-zga

{lft}{dn}  
\md

\mnl"B"~{dn}  
\mk  
{right}\mlq

## Sheet1

NOTE: The \m(acro)d(own) feature used several times here is easilly forgotten and is the cause of many failed macros!

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PAGE DOWN TO CONTINUE...

Explanation:

|Position curser on \$5.00 next to first B  
|Invoke 123-Learn and start a new macro  
|Start new macro...copy "\$5.00" (move down)  
|(move left)...start new macro line  
|start routine if not blank, start routine...  
| if<>"B" (move down)  
|tie knot in routine, start routine if blank  
|stop macro if blank, quit learn mode  
|move curser to next occurence of "B"  
|Reinvoke 123-Learn, append macro  
|Move right and press return  
|finish macro

|Put curser just right of first B again  
|Invoke 123-Learn, execute macro, append  
|(move left)(move down)  
|start new line, start routine if not...

|"B", (move down)  
|tie knot in routine (move right)  
|loop whole macro, quit 123-Learn.

First, you invoked 123-Learn by pressing "alt" and "z" simultaneously, you said you wanted to make a new macro (blitzing the original) and wanted "temporary". Then you started copying the \$5.00 down the column... You moved to the label column as your reference point, and then you started a new macro line - this is necessary since you're about to start a repetitive test of the current label to know whether to go down another cell or not, since you don't want the "/c~" to repeat, you need to make a special line for this test. Then you told your macro "if you don't see a blank, continue" and "if you don't see the label... "B," then move down one. Then you said "Do the same test on this cell." Here you said "When the test fails, if you're on a blank, then quit" Then you quit temporarily to... reposition yourself at the next occurrence of "B" Now you can say what to do when the macro sees a B... You got back in learn mode and appended to macro... You said "If none of the preceding tests were true... The cell isn't not equal to "B" (hint: it's "B") The cell is not a blank Then move right and press return" The \$5.00 is copied! Then you quit learn mode for real. On the second page of the tutorial, you... invoked 123-Learn, invoked the macro, saw it work, and appended to it after it was done... You got in the label column for reference. Started a new macro line for similar reasons as you had above. And you said "If you don't see a "B", then move down..." and do the same test on that cell!" If the cell isn't not equal to "B" (hint: it's "B") then you had the macro move right (moving over the \$5.00 you just copied there) and told the macro to start over again from the beginning!

123-LEARN  
Version 2.2

{MENUBRANCH LEARN}  
  
LEARN

tm

TUTORIAL SPREADSHEET

PRODUCT	PRICE
A	\$5.00
C	\$3.00
B	\$5.00
D	\$1.00
A	\$5.00
B	\$2.00
A	\$5.00
C	\$3.00

CONTINUED...

PRODUCT	PRICE
A	\$5.00
C	\$3.00
B	\$5.00

Sheet1

D	\$1.00
B	\$2.00
B	\$2.00
A	\$5.00
B	\$2.00
C	\$3.00
B	\$2.00

GO  
INVOKE PRESENT MACRO IN MEMORY UNDER "ALT-Z"  
#NAME?

L00A

L01A  
L000

L02A  
L00W

L03W  
L01W  
L02W

L12W  
L00N

L01N

L02N  
L01B  
L00B

L12\  
L22\  
L00S  
L01S  
L02S  
L1SN  
L00F

L03F

L01F  
L02F  
L0IF

L1IF



L00\

L01\

L00T

L01T

L02T

L00M

## Sheet1

NEW

WRITE NEW MACRO WITH 123-LEARN

```
{ONERROR L00B,L01B}{BREAKOFF}{LET L22\,"N "}{MENUBRANCH L00N}{MENUBRANCH LEARN}  
{INDICATE}{ONERROR L00B,L01B}{GET L000}{IF L000="\"}{INDICATE MACRO}{RECALC LEARN}{MENUBRANCH L00\}
```

TEST

{LONG NAME}{RETURN}

{LONG NAME}{RETURN}

TEMPORARY

Break

```
{BREAKOFF}{IF L01B="Break"}{INDICATE BREAK}{MENUBRANCH LEARN}{QUIT}
```

0,0,20

\

```
{LET L000,+@IF(@IF(@ISERR(@VALUE($L000)),0,$L000<>" "),"{BEEP "&$L000&"}",+$L000):VALUE}
```

LOOP

CAUSE THE MACRO TO REPEAT ITSELF FROM THE BEGINNING

```
{IF @ISERR(@FIND("{IF ",@@(L00T),0))}{LET L02T,L02T+1}{RECALC L00T}{LET L000,+"{LET "&L00T&","&L00T&"&""{BF  
{BEEP}{BEEP}{BEEP}{GETLABI
```

TEST

```
{LET L02T,L02T+1}{RECALC L00T}{LET L22\,+L000}{LET L000,+"{LET "&L00T&","&L00T&"&L22\}{BRANCH L00A}"}{LET L
```

DONE  
MACRO IS FINISHED

\$AR\$9

```
{goto}h29~  
/c~{DOWN}{LEFT}  
{IF #NOT#@CELLPOINTER("TYPE")="b"}{IF #NOT#(@CELLPOINTER("TYPE")="I"#AND#@CELLPOINTER("CONTENTS")  
{IF @CELLPOINTER("TYPE")="b"}{esc 8}{RETURN}  
{RIGHT}~{LEFT}{DOWN}  
{IF #NOT#(@CELLPOINTER("TYPE")="I"#AND#@CELLPOINTER("CONTENTS")="B")}{DOWN}{BRANCH $K$60}{RETURN  
{RIGHT}{BRANCH $k$57}
```

APPEND  
APPEND LAST MACRO WRITTEN WITH 123-LEARN

PERMANENT

{PANELOFF}{ESC 8}{GETLABEL  
{IF #NOT#@ISERR(@FIND(@LEFT(L02A,1),"0123456789!@\$^&^()-+=;'",<>/'",0))}{GETLABEL "NAME CANNOT BEGIN V

KNOT  
CAUSE THE MACRO TO REPEAT CURRENT

VALUE

FIELD

INSERT A VARIABLE FIELD FOR USER INPUT

DISPLAY

BRIEFLY DISPLAY THE COMMAND LINES THAT THIS MENU IS BLOCKING FROM VIEW  
{BREAKOFF}{INDICATE DSPLY}{GET L22}{BREAKON}{INDICATE}{MENUBRANCH LEARN}

DOWN

FORCE 123-LEARN TO WRITE TO NEXT CELL DOWN (USEFUL IN MACRO LOGIC DESIGN)  
{LET L000,""}{L00W}

LABEL

EXECUTE CONDITIONAL ROUTINE WHEN CURSER ENCOUNTERS A LABEL  
#NAME?  
{BRANCH L1IF}

PAUSE

INSERT A PAUSE UNTIL ANY KEY IS PRESSED

```
{LET L22\,"N "}{LET L000,"{GET L22\}"}{INDICATE PAUSE}{BRANCH L01A}
```

QUIT  
QUIT LEARN FACILITY  
{INDICATE}{QUIT}

IF  
CREATE ROUTINE EXECUTED ON THE TRUTH OF A CONDITION

{LET L22\,""}{RECALC LEARN}{MENUBRANCH



WAIT

INSERT A WAIT OF A SPECIFIC TIME

{LET L22,\"N \"}{GETLABEL \"ENTER TIME TO WAIT IN THE FORMAT HRS,MIN,SEC (MAX. 23,59,59): \",L12\\}{LET L000,+\"{

NOT

CREATE ROUTINE EXECUTED ON THE UNTRUTH OF A CONDITION

{LET L22,\"#NOT#\"}{RECALC LEARN}{MENUBRANCH L0IF}{MENUBRANCH L00F}{MENUBRANCH L00}{BRANCH L00A}

RESUME  
RESUME LEARN MODE  
{BRANCH L00A}

ROUTINE

{GETLABEL "ENTER NAME OF ROUTINE TO BE INVOKED: ",L000}{RECALC LEARN}

{IF @ISERR(@FIND("{IF ",@@(L00T),0))}{LET L02T,L02T+1}{RECALC L00T}{LET L22\,+L000}{LET L000,+"{LET "&L00T&"

SOUND

IMBED BEEPS IN MACRO (NUMBERS ARE RECOGNIZED AS SOUND DESIGNATORS)

MENU

{GETLABEL "ENTER NAME OF MENU TO BE INVOKED: ",L000}{RECALC LEARN}

{IF @ISERR(@FIND("{IF ",@@(L00T),0))}{LET L02T,L02T+1}{RECALC L00T}{LET L22\,+L000}{LET L000,+"{LET "&L00T&"  
{BRANCH L01F}  
{BRANCH L01F}

~

BELL

#NAME?

```
{IF L00W=""}{LET L00W,"{BEEP 0}{BEEP 0}{BEEP 2}{BEEP 3}"}{BRANCH L00A}  
{LET L00W,""}{BRANCH L00A}
```



MACROS

IMBED MACRO FEATURES IN MACRO

```
{LET L22,\"N \"}{MENUBRANCH L00F}{MENUBRANCH L00\\}{BRANCH L01A}
```