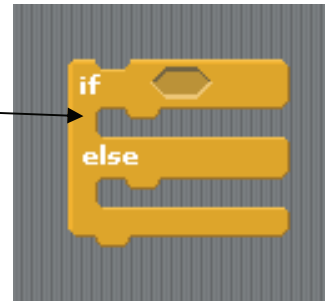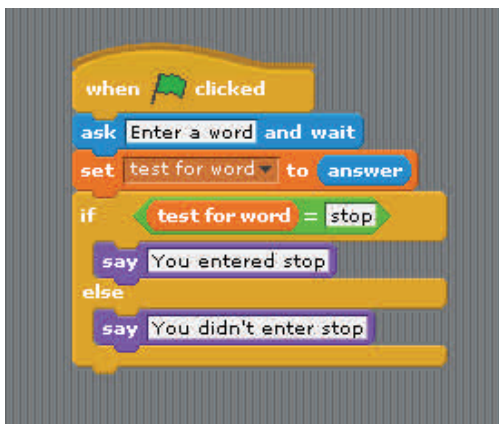# Computer Programming - If Else Commands in SCRATCH

2

Programmers often have a need to get a program to test a condition and to do something if the condition is met, or to do something else if the condition is not met. The If Else command block in SCRATCH is used for this purpose.

Try this simple program - it will show you how to use the command block:

As you can see, when you run the program, the user is asked to enter a word. Whatever is entered is copied from the variable named answer into the variable named test for word. The *If-else* block is testing to see if the variable named *test for w*ord contains the word stop. If it does, the program will display the text You *entered stop*. If it doesn't (the *Else* part of the command), the program will display the text, *You didn't enter stop.*

Exercises

1.   Create a program which uses an *If - Else* command block. The program will do the following. It will ask the user to input two numbers. Then it will ask the user if the user wants to add or subtract. The user will enter either the word *add* or the *word* subtract. You must write the program using an *If-else* block so that if *add* is entered, the program will tell the user that the choice has been made to add, then it will do the calculation and tell the user the answer, else, it will tell the user that the choice has ben made to subtract, will do the calculation and then tell the user the answer. Once you have tested the program and you are sure that it works, save it as Ifelse1.

2.   Extend the above program so that it uses three If blocks and one *If-else* block. Write the program so that the user is asked to enter two numbers, then asked if he/she wishes to add, subtract, multiply or divide. Build the calculator functionality into the four *if statements*. If the user enters something other than add, subtract, multiply or divide, this will be picked up by the *Else* part of the *If-else* block and the program will state something appropriate on the stage, before stopping.