

Chapter – 24 If else Statement

Lesson Objective :

- If – else statement

Skills to be attained : Usage of if-else statement, developing logical thinking.

Tools / Websites / Resources :

1. <https://www.onlinegdb.com//>
2. gedit text editor in Hitech lab

Teacher Led Instruction :

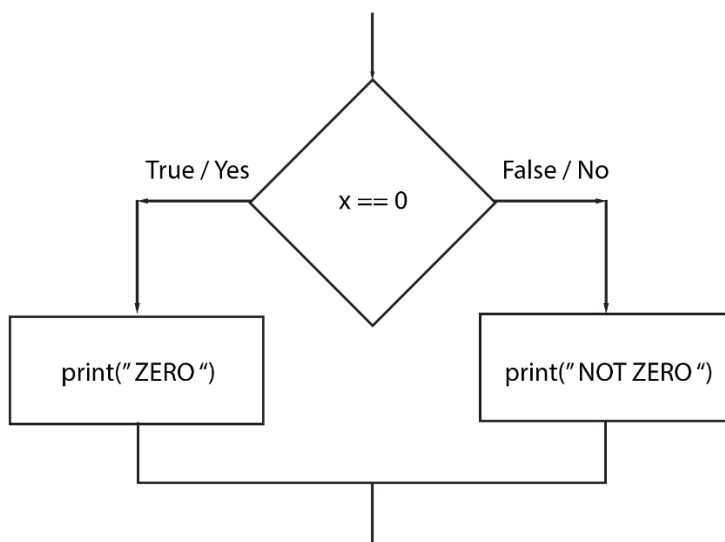
if-else statement

if the given condition is true, if-block will be executed otherwise else-block will be executed.

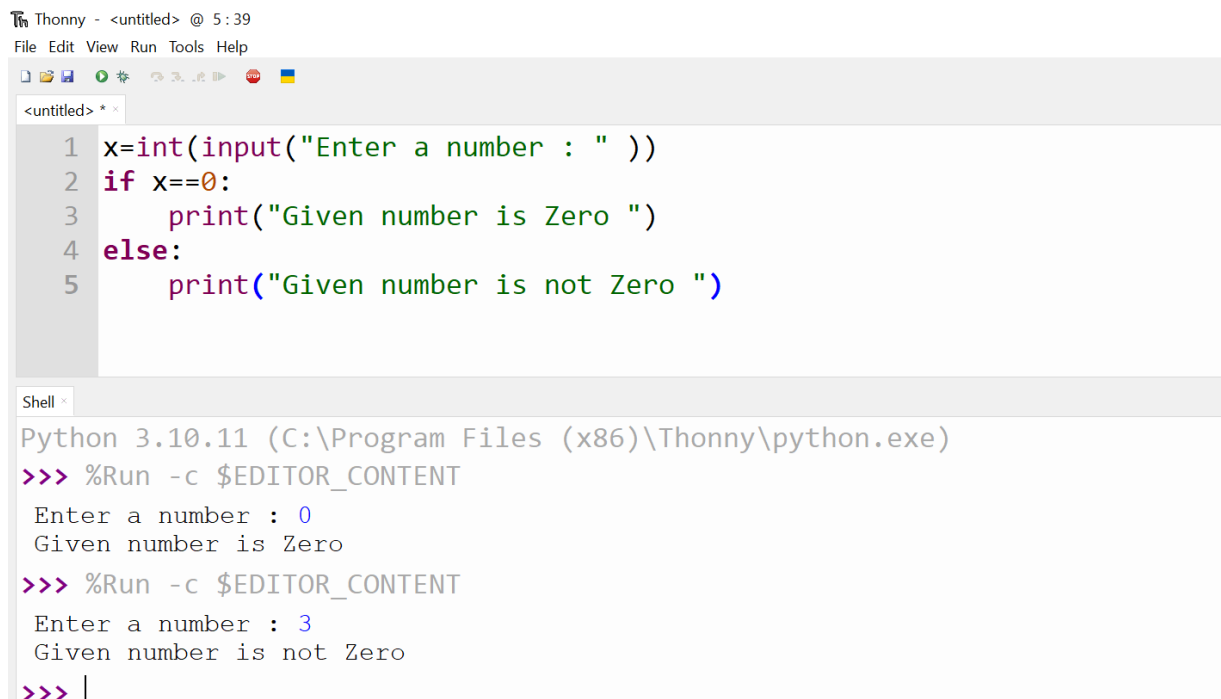
The general form of if-else statement is

```
if (condition):  
    ( if-block )  
else:  
    ( else block )
```

Example



Python Code for above example (Find out whether the given number is ZERO or NOT ZERO.)



The screenshot shows the Thonny IDE interface. The top bar indicates 'Thonny - <untitled> @ 5:39' with a menu bar (File, Edit, View, Run, Tools, Help) and a toolbar. The main editor window, titled '<untitled> *', contains the following Python code:

```
1 x=int(input("Enter a number : " ))
2 if x==0:
3     print("Given number is Zero ")
4 else:
5     print("Given number is not Zero ")
```

Below the editor is a 'Shell' window. It shows the command 'Python 3.10.11 (C:\Program Files (x86)\Thonny\python.exe)' and two successful runs of the code. The first run shows the input '0' and the output 'Given number is Zero'. The second run shows the input '3' and the output 'Given number is not Zero'. The prompt '>>>' is visible at the end of the second run.

Write a python code for maths quiz. Give three sums.

- a) What is $23 + 43$? if you give correct answer display GOOD, next question will be asked, else display “ WRONG “
- b) What is $125 + 145$? if you give correct answer display VERY GOOD, next question will be asked, else display “ WRONG “
- c) What is $2523 + 4523$? if you give correct answer display EXCELLENT, next question will be asked, else display “ WRONG “

Code :

```

<untitled> * *
1 print("Math Quiz")
2 x=int(input("23+43 = "))
3 if x==66:
4     print("Good")
5 else:
6     print("Wrong")
7 y=int(input("125+145 = "))
8 if y==270:
9     print("Very Good")
10 else:
11     print("Wrong")
12 z=int(input("2523+4523 = "))
13 if z==7046:
14     print("Excellent")
15 else:
16     print("Wrong")
17

```

```

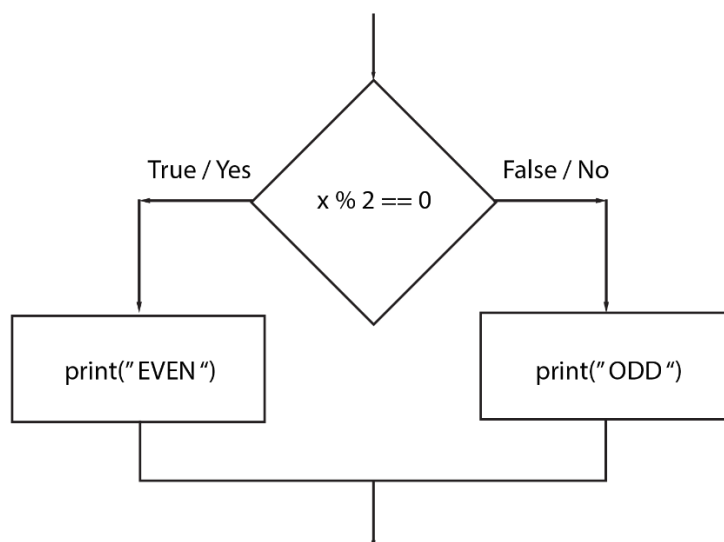
Shell x
>>> %Run -c $EDITOR_CONTENT
Math Quiz
23+43 = 66
Good
125+145 = 270
Very Good
2523+4523 = 7046
Excellent
>>> |

```

Student Activities

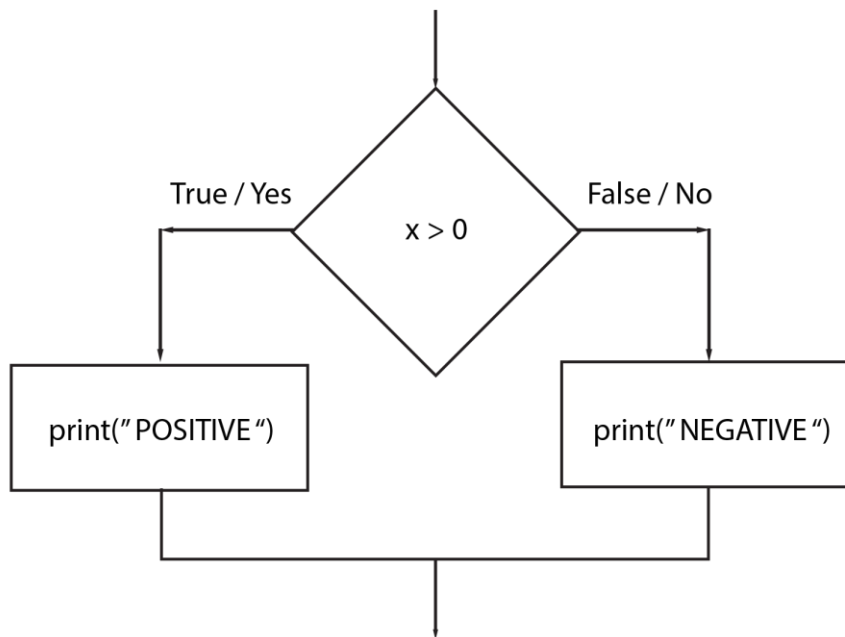
Activity1 :

Write a python code for the following control flow (Check whether the given number is ODD or EVEN.)



Activity2 :

Write a python code for the following control flow (Check whether the given number is **NEGATIVE** or **POSITIVE**).



Activity 3: Write a python code to find out the greatest of given two numbers.

Activity 4 : Write a python code to print the result (Pass or Fail – pass if the mark is greater than or equal to 35 else fail)

Activity 5 : Write a python code for maths quiz. Give three sums.

- What is $23 + 34$? if you give correct answer display GOOD, next question will be asked, else display “ WRONG “
- What is $45 + 78$? if you give correct answer display VERY GOOD, next question will be asked, else display “ WRONG “
- What is $38 + 32$? if you give correct answer display EXCELLENT, next question will be asked, else display “ WRONG “

Conclusion : The students will learn how to make logical decisions and how to write program for that.