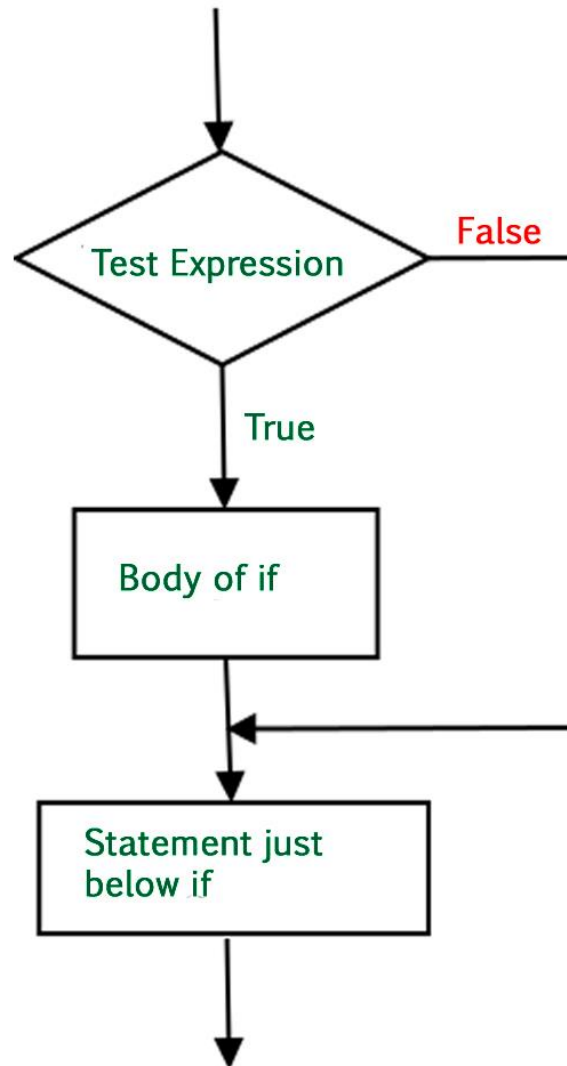




Conditional Statement – if statement

- Selection structure control the flow of statement execution based on some condition i.e. you can skip some of the instructions based on the condition.
- The **if** statement in Python will allow to make decision based on the condition. If the **test expression** is **True** then it allows to execute the statements inside **if** condition. If the **test expression** is **False** then it follows the statements after the if condition without executing the statements inside **if** condition
- Python **if** statement syntax is
if test expression:
statement(s) (with indentation)

if Statement Flow Chart



Sample Program

- Write a program to find out whether the given number is EVEN or ODD. Please read the number from user input.

```
a=int(input("Enter a number : "))
```

```
if a%2==0:
```

```
    print("Given number is EVEN")
```

```
if a%2==1:
```

```
    print("Given number is ODD")
```

Sample Program

- Write a program to verify the given number is positive or negative.
Read the number from the user input.

```
a=int(input("Enter a number : "))
```

```
if a>0:
```

```
    print("Given number is POSITIVE")
```

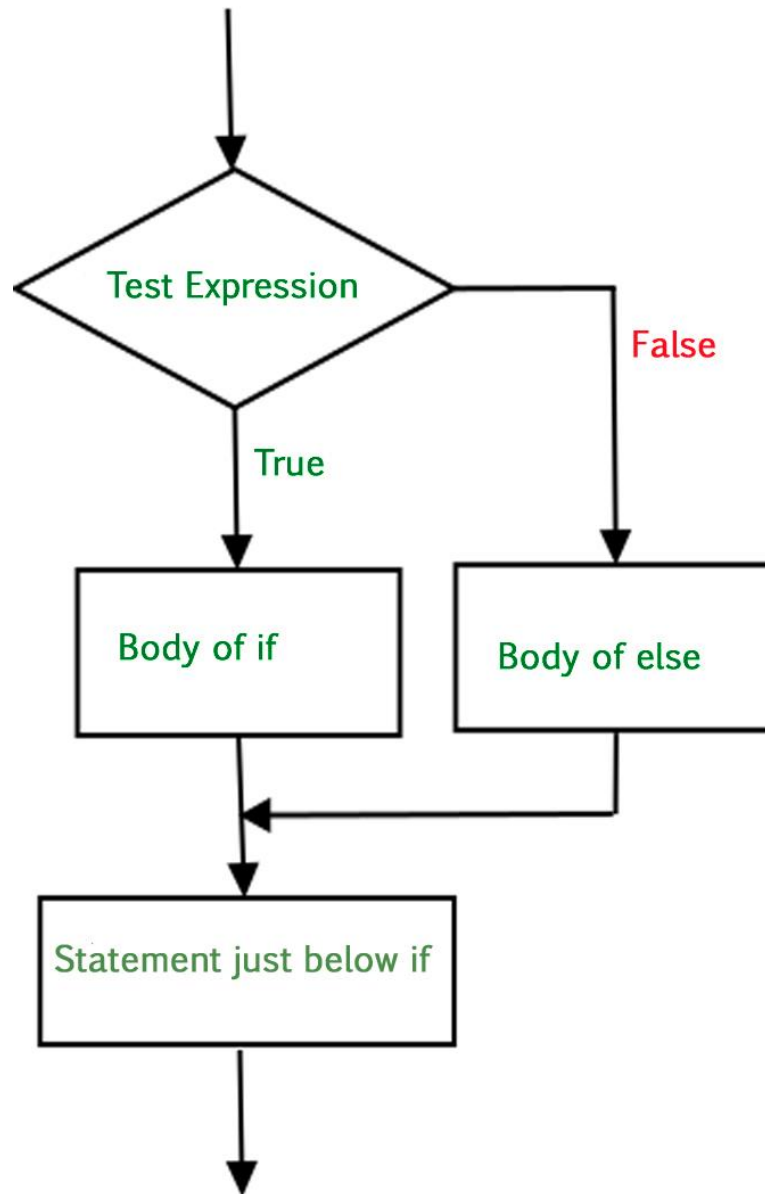
```
if a<0:
```

```
    print("Given number is NEGATIVE")
```

if – else Statement

- The **if - else** statement evaluates **test expression** and will execute **body of if** (statements in **if**) only when test condition is **True**. If the **test expression** is **False**, **body of else** is executed.
- Python **if** statement syntax is
 - if test expression:**
 - statement(s)** (with indentation)
 - else:**
 - statement(s)** (with indentation)

if – else Statement Flow Chart



Sample Program

- Write a program to find out whether the given number is EVEN or ODD. Please read the number from user input.

```
a=int(input("Enter a number : "))
```

```
if a%2==0:
```

```
    print("Given number is EVEN")
```

```
else:
```

```
    print("Given number is ODD")
```


Sample Program

- Write a program to find out the given year is a LEAP year or not.
Please read the number from user input.

```
a=int(input("Enter the year : "))
```

```
if a%4==0:
```

```
    print(a, "is LEAP year")
```

```
else:
```

```
    print(a, "is not LEAP year")
```

Sample Program

- Write a program to find out GREATEST among two given numbers.

```
num1=int(input("Enter a number: "))
```

```
num2=int(input("Enter a number: "))
```

```
if num1>num2:
```

```
    print(num1, "is GREATER")
```

```
else:
```

```
    print(num2, "is GREATER")
```

Sample Program

- Write a program to print the given THREE numbers in Ascending order.