



# Conditional Statements

## PYTHON PROGRAMMING COURSES

Including Python Compiler -Latvian

# What is a Conditional Statement?

- You can control the flow of a program by providing condition(s) to the code.
- In this lesson we mainly discuss two conditional statement types.

IF/ELSE statements

IF/ELIF/ELSE statements



# IF/ELSE Statements

- How if/else statement works
- If the condition is true the statements inside the body of if are executed.

## Python syntax

Python uses indentation as its method of grouping statements

if condition :

    Statements

else

    Statements

```
a = 200
```

```
b = 100
```

```
if a > b :
```

```
    print("a is greater than b")
```

```
else :
```

```
    print("a is less than b")
```

# IF/ELSE Statements

- If the condition is false, only the statements in the else block will be executed.

```
Python syntax
if condition :
    Statements
else:
    Statements
```

```
a = 200
b = 300
if a > b :
    print ("a is greater than b")
else :
    print ("a is less than b")
```



# Conditional Statements -Example

- If a given number is even, print “even” else print “odd”.

```
number = int(input("Enter the no: "))  
if(number%2)==1:  
    print("Odd")  
else:  
    print("Even")
```



Output:

```
Enter the no: 13  
Odd  
>>>  
-----  
Enter the no: 12  
Even  
>>>
```



# IF/ELIF/ELSE Statements

- When more than one condition to test, the program will execute only the block of statements under the satisfying condition (the condition evaluated to true).
- Other parts of the code will be ignored.

Syntax :

```
if condition1:  
    Statements  
elif condition 2:  
    Statements  
elif condition 3:  
    Statements  
else:  
    Statements
```

```
a = 100  
b = 100  
if a > b :  
    print("a is greater than b")  
elif a == b:  
    print ("a and b have same the value")  
else:  
    print("a is less than b")
```



# IF/ELIF/ELSE Statements

- If all conditions are false, only the statement(s) inside the else block will be executed.

```
a = 50
b = 100
if a > b :
    print("a is greater than b")
elif a == b:
    Print ("a and b have same the
value")
else:
    print("a is less than b")
```

Output : a is less than b

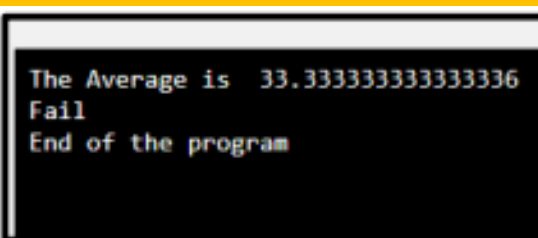


# Conditional Statements -Example

- Student marks are input to a program as using variables m1,m2 and m3. Write a program to calculate the average and display the grade and the average.

```
m1=80
m2=10
m3=10
avg=(m1+m2+m3)/3
    print ("The Average is ", avg)
if avg>=75:
    print("Result is A")
elif avg >=60:
    print("Result is B")
elif avg >=40:
    print("Result is C")
else:
    print("Fail")
print("End of the program" )
```

Output



```
The Average is  33.333333333333336
Fail
End of the program
```





# Lesson Summary

- What is a Conditional Statement?
- IF/ELSE Statements
- IF/ELIF/ELSE Statements



Thank You

