

Programming Fundamentals using Python🐍

Lecture

- statements
- branching
- looping
- coding problems



Statements

Instructions to the Python Virtual Machine to do something.

declarations,

assignments,

methods calls

input/output statements,

classes and objects

etc.

Conditional Statements

Single If

```
1 marks = 90
2
3 if marks > 80 :
4     print("lets party")
```



Conditional Statements

If-else block

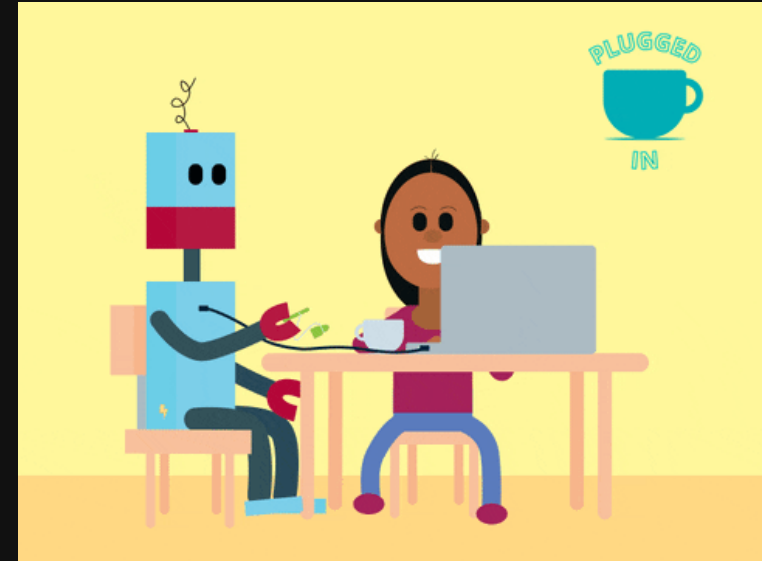
```
1 marks = 90
2
3 if marks > 80 :
4     print("lets party")
5 else:
6     print("work hard next time")
7
```



Conditional Statements

If-else-if-else block

```
1 marks = 90
2
3 if marks > 80 :
4     print("lets party")
5 elif marks > 70:
6     print("great job")
7 else:
8     print("work hard next time")
```



Mutiple if blocks?

In line **if-else** block?

Loops

Do something again & again!



```
1 //Init
2
3 while condition is True:
4
5     //execute some stuff
6
7     //update
```

While Loop



While Loop Example

For Loop



Code Demo!



Number Sum

Find the sum of numbers from 1 to N

Example

$N = 4$

Output

10



Number Sum-II

Take input N, followed by N numbers find their sum.

Example

N = 4

Output

10



Prime Number

Given a Number, check if it is Prime or Not!

Input

11

Output

Yes



Sum the Digits

Given a Number, print the sum of its digits.

Input

11

Output

2



Time To Try!



8 Mins

Challenge 🔥

Stair Pattern

*

Challenge 🔥

Triangle Pattern

```
  *  
 ***  
*****
```

Challenge 🔥

Sum the digits of a given number.

Challenge 🔥

Sum the digits of a given number.

Code Repository

<https://github.com/prateek27/python-nov-21>