

# K.Sangeethraj

## Assignment 2

### 1] While Loop

```
In [3]: i= 10  
while(i > 2):  
    i -=1  
    print(i)
```

executed in 17ms, finished 10:00:55 2021-10-20

9  
8  
7  
6  
5  
4  
3  
2

```
In [5]: # Program to add Whole numbers
```

executed in 12ms, finished 10:01:11 2021-10-20

```
In [6]: number = int(input("Enter number: "))  
item = 0  
i = 0  
while i <= number:  
    item = item + i  
    i = i+1  
    print(item)
```

executed in 2.29s, finished 10:01:14 2021-10-20

Enter number: 10  
0  
1  
3  
6  
10  
15  
21  
28  
36  
45  
55

### 2] For loop



```
In [12]: for i in range(1,21,5):  
         print(i)
```

executed in 6ms, finished 22:29:16 2021-10-19

1  
6  
11  
16

```
In [15]: user=input('enter the letter :')  
         for i in user:  
             print(i)
```

executed in 50.0s, finished 22:35:25 2021-10-19

enter the letter :patience is key to success  
p  
a  
t  
i  
e  
n  
c  
e  
  
i  
s  
  
k  
e  
y  
  
t  
o  
  
s  
u  
c  
c  
e  
s  
s

### 3] If Else statement

```
In [9]: price_of_the_shirt= int(input("Rate of the shirt : "))  
         if (price_of_the_shirt) > 500:  
             print("The shirt is costly")  
         else:  
             print("The shirt is not costly")
```

executed in 1.91s, finished 10:12:59 2021-10-20

Rate of the shirt : 600  
The shirt is costly

```
In [10]: user_input = input("The string is : ")
if len(user_input) > 10:
    print("The string is long")
else:
    print("The string is short")
```

executed in 20.6s, finished 10:41:52 2021-10-20

The string is : life is full of surprises

The string is long

## 4] If Elif Else statement

```
In [13]: temperature = float(input("The Temperature is : "))
if temperature < 98.6:
    print("Normal Body Temperature")
elif 98.6 < (temperature) < 100:
    print("MOderate FEver Condition")
else:
    print("High Fever Conditon")
```

executed in 1.90s, finished 10:53:11 2021-10-20

The Temperature is : 101

High Fever Conditon

```
In [14]: JEEE_Results = int(input("The Marks obtained is :"))
if 85 < (JEEE_Results) < 100:
    print("The student is eligible for getting medical seat")
elif (JEEE_Results) < 40:
    print("The student is not eligible for getting medical seat")
else:
    print("The student is in the waiting list")
```

executed in 3.26s, finished 11:00:21 2021-10-20

The Marks obtained is :50

The student is in the waiting list

## 5] User Defined Functions without for loop , if loop

```
In [15]: def squarerooot(number):
    return number * number          # using return statement
```

executed in 13ms, finished 11:19:20 2021-10-20

```
In [16]: squarerooot(10)
```

executed in 23ms, finished 11:19:28 2021-10-20

Out[16]: 100

```
In [22]: def cuberoot (number):
    print("The cuberoot of number is ", number* number* number)  # using print st
```

executed in 5ms, finished 11:23:20 2021-10-20

In [23]: `cuberoot(3)`

executed in 12ms, finished 11:23:22 2021-10-20

The cuberoot of number is 27

## 6] User Defined Functions with for loop

In [35]: `def myfunction(*statement):  
 for i in statement:  
 print(i)`

executed in 9ms, finished 11:47:32 2021-10-20

In [37]: `myfunction("John sir is the most talented teacher")`

executed in 19ms, finished 11:48:52 2021-10-20

John sir is the most talented teacher

In [33]: `def length(string):  
 count=0  
 for i in string:  
 count += 1  
 return (count)`

executed in 11ms, finished 11:36:04 2021-10-20

In [34]: `length("Free Left")`

executed in 8ms, finished 11:36:30 2021-10-20

Out[34]: 9

## 7] User Defined Functions with for loop,if loop

In [59]: `def evennumber(number):  
 for i in range(1):  
 if number% 2==0:  
 print("It is even number")  
 else:  
 print("It is odd number")`

executed in 12ms, finished 14:32:55 2021-10-20

In [58]: `evennumber(90)`

executed in 13ms, finished 14:32:51 2021-10-20

It is even number  
It is even number

In [ ]:

## 8] Break

```
In [2]: for n in range(0,10,5):  
        if n !=5:  
            print(n)  
        else:  
            break
```

executed in 15ms, finished 12:28:31 2021-10-20

0

```
In [8]: i = 0  
while i<10:  
    print(i)  
    if i ==5:  
        break  
    i= i+1
```

executed in 11ms, finished 12:34:20 2021-10-20

0

1

2

3

4

5

## 9] Continue

```
In [10]: statement=input("The statement is : ")  
for i in statement:  
    if i == "e":  
        continue  
    print(i)
```

executed in 3.79s, finished 12:39:08 2021-10-20

The statement is : sangeeth

s

a

n

g

t

h

```
In [11]: for i in range(30):  
        if i%2:  
            continue  
        print(i)
```

executed in 13ms, finished 12:41:11 2021-10-20

0  
2  
4  
6  
8  
10  
12  
14  
16  
18  
20  
22  
24  
26  
28

## 10] For loop with in operator

```
In [19]: for number in range(1,100,10):  
        print("The random numbers are: ",number)
```

executed in 9ms, finished 12:54:20 2021-10-20

The random numbers are: 1  
The random numbers are: 11  
The random numbers are: 21  
The random numbers are: 31  
The random numbers are: 41  
The random numbers are: 51  
The random numbers are: 61  
The random numbers are: 71  
The random numbers are: 81  
The random numbers are: 91

```
In [15]: a = "mary had a little lamp"
for i in range(len(a)):
    print(i,a[i])
```

executed in 6ms, finished 12:51:29 2021-10-20

```
0 m
1 a
2 r
3 y
4
5 h
6 a
7 d
8
9 a
10
11 l
12 i
13 t
14 t
15 l
16 e
17
18 l
19 a
20 m
21 p
```

## 11] For loop with if statement

```
In [20]: for i in range(10):
        if i%2==0:
            print("It is an even number")
        else:
            print("It is a odd number")
```


executed in 18ms, finished 12:57:08 2021-10-20

```
It is an even number
It is a odd number
It is an even number
It is a odd number
It is an even number
It is a odd number
It is an even number
It is a odd number
It is an even number
It is a odd number
```

```
In [24]: string = input("The string is : ")
        for i in string:
            if len > 15:
                print("string is long")
            else:
                print("string is short")
```

executed in 3.20s, finished 13:06:13 2021-10-20

The string is : dhoni

 TypeError: '>' not supported between instances of 'builtin\_function\_or\_method' and 'int' ▶

## 12] For loop with not in operator

```
In [33]: a =10,12,24,35
        for i in range(5):
            i=i+10
            if i not in a:
                print(a)
```

executed in 11ms, finished 14:06:40 2021-10-20

(10, 12, 24, 35)  
(10, 12, 24, 35)  
(10, 12, 24, 35)



```
In [38]: string = "Python is the upcoming programming language"
         for i in string:
             if ("was") not in string:
                 print(i)
```

executed in 17ms, finished 14:09:15 2021-10-20

P  
y  
t  
h  
o  
n  
  
i  
s  
  
t  
h  
e  
  
u  
p  
c  
o  
m  
i  
n  
g  
  
p  
r  
o  
g  
r  
a  
m  
m  
i  
n  
g  
  
l  
a  
n  
g  
u  
a  
g  
e

**13] if with in operator**

```
In [44]: i = "Dhoni", "Shewag", "virat", "raina"
         if "Dhoni" in i:
             print("the cricketer name is correct")
         else:
             print("the cricketer name is wrong")
```

executed in 13ms, finished 14:18:58 2021-10-20

the cricketer name is correct

```
In [45]: alpha= 'a','b','c','d','e'
         alphanum= 1,23,432,'a'
         for i in alpha:
             if i in alphanum:
                 print(i)
```

executed in 16ms, finished 14:23:00 2021-10-20

a

## 14] if with not in operator

```
In [47]: directions = 'north','east','south','west'
         if "southwest" not in directions:
             print("the direction is correct")
         else:
             print("the direction name is wrong")
```

executed in 16ms, finished 14:25:47 2021-10-20

the direction is correct

```
In [56]: alpha= 'a','b','c','d','e'
         alphanum= 1,23,432,'567'
         if alphanum not in alpha:
             print("True")
```

executed in 16ms, finished 14:29:11 2021-10-20

True

=====END=====



In [ ]: