

Today Topics

- while loop
- strings and string functions

```
In [1]: 1 for i in range(1,11):
        2     print("Python", end = " ")
```

Python Python Python Python Python Python Python Python Python Python

Syntax

While condition:

- set of statements

- increment/ decrement

```
In [2]: 1 n = 1 #2 #11
        2 while n<=10: # 1<=10
        3     print(n*n,end = " ")
        4     n=n+1 #n+=1
        5
        6 #for i in range(1,100)
```

1 4 9 16 25 36 49 64 81 100

```
In [3]: 1 i = 1 # 1,2,3,4,5,6
        2 while i<6: # 1,2,3,4,5
        3     if i == 3: #1,2
        4         break
        5     print(i)
        6     i+=1
        7
```

1
2

```
In [4]: 1 n = int(input())
        2 while n<=50:
        3     print(n, end = " ")
        4     n+=1
```

10
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 3
6 37 38 39 40 41 42 43 44 45 46 47 48 49 50

```
In [5]: 1 for i in range(10,20,1):
        2     print("python",end = " ")
```

python python python python python python python python python python

```
In [6]: 1 n1 = int(input())    # 10000
        2 n = int(input())   # 11000
        3 amount = n1-1000    # 9000
        4 while True:
        5     if amount > n:
        6         print("take your money")
        7     else:
        8         print("Amount exceeds balance")
        9     break
       10
```

10000
11000
Amount exceeds balance

```
In [7]: 1 ac_bal = 10000    # 10000
        2 withdraw_amount = int(input()) # 11000
        3 max_withdraw = ac_bal-1000    # 9000
        4 while True:
        5     if max_withdraw>withdraw_amount:
        6         print("take your money")
        7     else:
        8         print("amount exceeds")
        9     break
```

11000
amount exceeds

String

" "

```
In [8]: 1 s = " "
        2 type(s)
```

Out[8]: str

```
In [9]: 1 s = "Pyhton Programming 123@"
```

Indexing

- Positive index
- negative index

```
In [10]: 1 s[5]
         2 s[10]
         3 s[8]
         4 s[-3]
```

Out[10]: '2'

Slicing

varname[start index : end index: step count]

```
In [11]: 1 s[19:22] # 19,20,21
```

Out[11]: '123'

```
In [12]: 1 print(s)
         2 s[15:26:2] # 15,17,19,21,23,25
```

Pyhton Programming 123@

Out[12]: 'ig13'

```
In [13]: 1 print(s[0:24:3])
         2 print(s[0::3])
         3 print(s[::3]) # for i in range(11,3) # s[0:24:3]
```

Pt oai 3
Pt oai 3
Pt oai 3

```
In [14]: 1 s[18:5:-2] # for i in range(10,1,-1)
```

Out[14]: ' nmagr '

```
In [15]: 1 s[-6:-10:-1] # -6,-5,-4,-3,-2
```

Out[15]: 'gnim'

```
In [16]: 1 s[::2] # -1:: -1
```

Out[16]: '@2 nmagr ohP'

```
In [17]: 1 len(s)
```

Out[17]: 23

```
In [18]: 1 t = len(s)//2
         2 s[t]
```

Out[18]: 'r'

```
In [19]: 1 s[len(s)//2]
```

Out[19]: 'r'

```
In [20]: 1 len(s)//2
```

Out[20]: 11

```
In [21]: 1 s = "Hello" #5
         2 t = (len(s)//2)
```

```
In [22]: 1 s[(len(s)//2)]
```

Out[22]: 'l'

```
In [23]: 1 hari =874982876872687587
         2 print(hari+67)
```

874982876872687654

```
In [24]: 1 hari==200
```

Out[24]: False

```
1
```