

```
In [1]: ### Task-2 Find the factors of a number
```

Daily Task - 2

Submit 2 examples for each module.

1. for loop
2. user defined functions without for loop
3. user defined functions with for loop
4. for loop with in operator
5. for loop with not in operator

```
In [3]: ### Find the factors of a number
```

```
In [4]: x= int(input("Enter your number: "))  
        for i in range(1,x+1):  
            if x%i == 0:  
                print(i)
```

Enter your number: 70

1
2
5
7
10
14
35
70

```
In [5]: #### 1. For Loop
```

```
In [6]: colors= ['yellow','red','white','black','maroon']
```

```
In [7]: for i in colors:  
        print(i)
```

yellow
red
white
black
maroon

```
In [8]: list= {12,23,34,45,56,78}
```

```
In [9]: for i in list:  
        print(i)
```

34
23
56
12

45
78

```
In [10]: zoo=['tiger','bear','zirraffe','elephant','kangaroo']
```

```
In [11]: for i in zoo:
          print(i)
```

tiger
bear
zirraffe
elephant
kangaroo

```
In [12]: for i in range(1,7):
          print(i)
```

1
2
3
4
5
6

```
In [13]: ### 2. User-defined function without for Loop
```

```
In [14]: x= int(input("Enter your number: "))
          def square_num(x):
              return x**2
          print("Square of the number is: ",square_num(x))
```

Enter your number: 30
Square of the number is: 900

```
In [16]: y= int(input("Enter your number: "))
          def remainder(y):
              return y%3
          print("Remainder is: ",remainder(y))
```

Enter your number: 109
Remainder is: 1

```
In [17]: ### 3. Use-defined function with for Loop
```

```
In [18]: def print_numbers(n):
          for i in range(1,n+1):
              print(i)
```

```
In [19]: print_numbers(10)
```

1
2
3
4
5

6
7
8
9
10

```
In [20]: def my_func(*arg):  
          for i in arg:  
              print(i)  
          print("Arguement values are: ")  
          my_func("Welcome", "home")
```

Arguement values are:
Welcome
home

```
In [21]: def func_2(**key):  
          for i in key:  
              print(i)  
          print("key arguments are: ")  
          func_2(key_1="large", key_2="medium", key_3="small")
```

key arguments are:
key_1
key_2
key_3

In []:

```
In [22]: ### 4. For Loop with IN operator
```

```
In [23]: fruits= ["pine", "strawberry", "mango"]
```

```
In [24]: for x in fruits:  
          print(x)
```

pine
strawberry
mango

```
In [25]: anim=["lion", "bear", "tiger", "ape"]
```

```
In [26]: for i in anim:  
          print(i)
```

lion
bear
tiger
ape

```
In [27]: for i in "Elephant":  
          print(i)
```

E
l

e
p
h
a
n
t

In [28]:

```
for i in anim:  
    print(i)  
    if i== "tiger":  
        break
```

lion
bear
tiger

In [29]:

```
for i in fruits:  
    if i=="mango":  
        break  
    print(i)
```

pine
strawberry

In []: