

```
In [ ]:  ▶ for i in range(0,20):  
          if i%2 !=0 and i%3 !=0 :  
              print(i,"")
```

```
In [27]:  ▶ def nmbr(x):  
            for i in range(2,x):  
                if x%i==0:  
                    print(x,"is not a prime nmbr")  
                    break  
            else:  
  
                print(x,"is prime")  
                break
```

```
In [28]:  ▶ nmbr(5)
```

5 is prime

```
In [46]:  ▶ def fib(x):  
            a=0  
            b=1  
            c=0  
            print(a)  
            for i in range(0,x):  
                if(b>=x):  
                    break  
                else:  
                    print(b)  
                    c=a  
                    a=b  
                    b=a+c
```

```
In [47]:  ▶ fib(100)
```

0  
1  
1  
2  
3  
5  
8  
13  
21  
34  
55  
89

```
In [59]:  ▶ def fact(x):  
            a=1  
            for i in range(1,x+1):  
                a=i*a  
            print(a)
```

In [60]: `fact(5)`

120

In [54]: `for i in range(10,0,-1):  
 print(i)`

10  
9  
8  
7  
6  
5  
4  
3  
2  
1

In [107]: `def factors(x):  
 for i in range(1,x+1):  
 if x%i==0:  
 print(i)  
 i=i+1`


In [108]: `factors(100)`

1  
2  
4  
5  
10  
20  
25  
50  
100

In [85]: `def nmbr():  
 n=1  
 while n!=0:  
 n=int(input("Enter the number : "))  
 print(n)`

In [87]:  nmbr()

```
Enter the number : 10
10
Enter the number : 9
9
Enter the number : 8
8
Enter the number : 7
7
Enter the number : 7
7
Enter the number : 0
0
```

In [109]: 

```
def factors(x):
    list_=[]
    for i in range(1,x+1):
        if x%i==0:
            i=i+1
            list_.append(i)
    print(list_)
```

In [110]:  factors(100)

```
[2, 3, 5, 6, 11, 21, 26, 51, 101]
```

In [157]: 

```
def func():
    list1=[]
    list2=[]
    list3=[]
    for i in range(1,100+1):
        list1.append(i)
    for j in list1:
        if j%2==0 :
            list2.append(j)
        else:
            list3.append(j)
    print("list1 is :",list1)
    print("list2 is :",list2)
    print("list3 is :",list3)
```

In [158]: ▶ func()

```
list1 is : [1, 2, 3, 4, 5, 6, 7, 8, 9, 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, 36, 37,
38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56,
57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75,
76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94,
95, 96, 97, 98, 99, 100]
list2 is : [2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34,
36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72,
74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100]
list3 is : [1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33,
35, 37, 39, 41, 43, 45, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71,
73, 75, 77, 79, 81, 83, 85, 87, 89, 91, 93, 95, 97, 99]
```

```
In [32]: ▶ def reverse_():
list1=[]
for i in range(100,0,-1):
    list1.append(i)
print(list1)
```

In [35]: ▶ reverse\_()

```
[100, 99, 98, 97, 96, 95, 94, 93, 92, 91, 90, 89, 88, 87, 86, 85, 84, 83, 82,
81, 80, 79, 78, 77, 76, 75, 74, 73, 72, 71, 70, 69, 68, 67, 66, 65, 64,
63, 62, 61, 60, 59, 58, 57, 56, 55, 54, 53, 52, 51, 50, 49, 48, 47, 46, 45,
44, 43, 42, 41, 40, 39, 38, 37, 36, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26,
25, 24, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6,
5, 4, 3, 2, 1]
```

```
In [3]: ▶ def lis():
list1=[]
for inpt in range(1,10+1):
    inpt=int(input())
    list1.append(inpt)
for prime in range(2,list1):
    if list1%prime==0:
        print(None)
    else:
        print("it is a prime nmbr")
```

In [4]: ▶ lis()

```
1
3
2
4
5
6
7
7
8
3
```

```
-----
TypeError                                Traceback (most recent call last)
<ipython-input-4-82493f8766d3> in <module>
----> 1 lis()

<ipython-input-3-8b23abc8bf43> in lis()
      5     list1.append(inpt)
      6     a=list1
----> 7     for prime in range(2,a):
      8         if list1%prime==0:
      9             print(None)
```

**TypeError:** 'list' object cannot be interpreted as an integer

In [38]: ▶

In [39]: ▶

In [ ]: ▶