While Loop

In [1]:

```python
n = int(input())
count = 1

while(count<=n):
    print(1)
    count=count+1
```

```
5
1
1
1
1
1
```

In [2]:

```python
#print all natural number till 1 to N
n = int(input())
count = 1

while(count<=n):
    print(count)
    count=count+1
```

```
10
1
2
3
4
5
6
7
8
9
10
```

Check Number is prime or not.

In [8]:

```python
pri_num = int(input())
div = 2 # because prime is only divisible by and itself
flag = False
while(div < pri_num):
    if(pri_num %div == 0):
        flag = True # this code run then while loop come in this loop
    div = div+1

if flag == True:
    print("Number is not prime.")
else:
    print("Number is prime.")
```

```
20
Number is not prime.
```

In [13]:

```python
# with 1 and 0 checking
pri_num = int(input())
div = 2 # because prime is only divisible by and itself
flag = False
while(div < pri_num):
    if(pri_num %div == 0):
        flag = True # this code run then while loop come in this loop
    div = div+1

if pri_num == 1 or pri_num == 0 :
    print("Number is neither not prime nor prime.")
elif flag == True:
    print("Number is not prime.")
else:
    print("Number is prime.")
```

```
90
Number is not prime.
```

Nested While loop

In [20]:

```python
n = int(input())
k = 2 # go from 2 to n
print("Prime numbers tiil ", n," are: ")
while(k<=n):
    #check k is prime or  not
    d = 2
    flag = False

    while(d < k):
        if(k % d == 0):
            flag = True
        d = d + 1

    if flag == False:
        print(k)

    k = k + 1

# flag == False is equal to not(flag)
```

```
100
Prime numbers tiil  100  are:
2
3
5
7
11
13
17
19
23
29
31
37
41
43
47
53
59
61
67
71
73
79
83
89
97
```

In [ ]: