Today Topics

- string methods

  Data Structures
- List

In [2]:

```python
# prime number
# 17(1,2,3,5....17) # 2
# 17 (2,3,5....16) # 0
```

In [4]:

```python
# factors
#8 (1,2,4,8)
n = int(input("enter a number:")) # 50
for i in range(2,n):  #2,3,4,5,6
    print(i)

```

```
enter a number:8
2
3
4
5
6
7
```

In [7]:

```python
# factors
#8 (1,2,4,8)
# 50
n = int(input("enter a number:")) # 50
for i in range(1,n+1):  #1,2,3....8
# for i in range(2,n):  #2,3....7
    # if n
        print(i)
```

```
enter a number:8
1
2
3
4
5
6
7
8
```

In [6]:

```python
print(5/2)
print(5//2)
print(5%2)
```

2.5
2
1

In [8]:

```python
# factors
#8 (1,2,4,8)

n = int(input("enter a number:")) # 8
count = 0
for i in range(1,n+1):   #1,2,3....8
# for i in range(2,n):   #2,3....7
    if n%i == 0:
        print(i)
```

enter a number:8
1
2
4
8

In [9]:

```python
# factors
#8 (1,2,4,8)

n = int(input("enter a number:")) # 4(1,2,4)
c = 0 #1,2
for i in range(1,n+1):   #1,2,3,4
# for i in range(2,n):
    if n%i == 0:   # 4%1==0,  4%2==0,4%3==0,4%4==0
        # print(i)
        c=c+1   # 1,2
print(c)
```

enter a number:8
4

In [10]:

```python
1
2
3  n = int(input("enter a number:")) # 4(1,2,4)
4  c = 0 #1,2,3
5  for i in range(1,n+1):   #1,2,3,4
6  # for i in range(2,n):
7      if n%i == 0:   # 4%1==0, 4%2==0,4%3==0,4%4==0
8          # print(i)
9           c=c+1   # 1,2
10 print(c)
```

enter a number:100
9

In [11]:

```python
1
2  n = int(input("enter a number:")) # 6(1,2,3,6)
3  c = 2
4   #1,2,34
5  for i in range(2,n): #2,3,4 ,5
6      if n%i == 0:
7          # print(i)
8           c=c+1
9  print(c)
```

enter a number:6
4

In [12]:

```python
1  # prime number
2  # 17(1,2,3,5....17)  # 2 # 1 =0 #8 =4
3  # 17 (2,3,5....16)   # 0
```

In [16]:

```python
1  n = int(input()) #5
2  c=0
3  for i in range(1,n+1): #1,2,3,4,5,6
4      if n%i ==0:  # 6%1==0,6%2==0
5          c+=1  # 1,2,3
6          # print(i)
7  if c== 2:
8      print(n,"is prime")
9  else:
10     print(n,"is not prime")
```

97
97 is prime

In [19]:

```python
n = int(input()) #5
#c=0
for i in range(2,n):  #2,3,4
    if n%i==0:
        print(n,"is not prime")
else:
    print(n,"is prime")
```

17
17 is prime

In [20]:

```python
n = int(input()) #5
c=0
for i in range(2,n+1):  #2,3,4,5
    if n%i==0:
        c+=1
if c==1:
    print("is prime")

else:
    print(n,"is not prime")
```

97
is prime

In [26]:

```python
n = int(input()) #9
#c=0
for i in range(2,n+1):  #2,3,4,5,6,7,8,9
    if n==2:
        print("prime")
    elif n%i==0:  #9%2==0
        print(n,"is not prime")
        break
    elif n%i!=0:
        print(n,"is prime")
        break
```

98
98 is not prime

In [30]:

```python
# 1,2,3,4,5
for i in range(1,6):
    if i == 1:
        print("no 1")
    elif i ==2:
        print("no 2")
    elif i ==3:
        print("no 3")
    elif i ==4:
        print("no 4")
    elif i ==5:
        print("no 5")


```

```
no 1
no 2
no 3
no 4
no 5
```

In [ ]:

```python

```