Question.11

In [1]:
```
x =int(input("Enter the number: "))

def fact(n):
    f=1

    for i in range(1,n+1):
        f = f*i

    return f

print(fact(x))
```

```
Enter the number: 8
40320
```

Question.12

In [2]:
```
X = int(input("Enter the Number: "))
count=0
i=1
while i<=X:
    if X%i==0:
        count=count+1

    i=i+1

if count==2:
    print("Its a Prime number")

elif count>2:
    print("Its a Composite number")

else:
    print("The number is neither Prime nor composite")
```

```
Enter the Number: 11
Its a Prime number
```

Question.13

In [3]:
```
x=input("Enter String: ")
y=x[-1::-1]

if (x==y):
    print("Palindrome")

else:
    print("Not Palindrome")
```

```
Enter String: naman
Palindrome
```

Question.14

In [4]:
```
#for finding hypotenuse.
from math import sqrt

x = float(input("Enter x: "))
y = float(input("Enter y: "))

z = sqrt(x**2 + y**2)

print("The length of hypotenuse is:", z)
```

```
Enter x: 6
Enter y: 8
The length of hypotenuse is: 10.0
```

In [5]:
```
#for finding side other than hypotenuse
from math import sqrt

a = float(input("Enter hypotenuse: "))
b = float(input("Enter side: "))

c = sqrt(a**2 - b**2)

print ("The length of third side is:", c)
```

```
Enter hypotenuse: 10
Enter side: 6
The length of third side is: 8.0
```

Question.15

In [6]:
```
a = input("Enter the string: ")
d = dict()
for i in a:
    if i in d:
        d[i] = d[i] + 1
    else:
        d[i] = 1

print(d)
```

```
Enter the string: good morning how are you
{'g': 2, 'o': 5, 'd': 1, ' ': 4, 'm': 1, 'r': 2, 'n': 2, 'i': 1, 'h': 1, 'w': 1, 'a': 1,
'e': 1, 'y': 1, 'u': 1}
```

In [ ]:
```

```