

1. Write a program to find those numbers which are divisible by 7 and multiple of 5, between 1500 and 2700(both included)

```
In [1]: l=list()
for i in range(1500,2701):
    if (i%7)==0 and (i%5)==0:
        l.append(i)
print(l)

[1505, 1540, 1575, 1610, 1645, 1680, 1715, 1750, 1785, 1820, 1855, 1890, 1925, 1960, 1995, 2030, 2065, 2100, 2135, 2170, 2205, 2240, 2275, 2310, 2345, 2380, 2415, 2450, 2485, 2520, 2555, 2590, 2625, 2660, 2695]
```

2. Python program to add two numbers

```
In [2]: x=input('Type a number:')
y=input('Type another number:')
sum=int(x)+int(y)
print('The sum is:',sum)

Type a number:4
Type another number:5
The sum is: 9
```

3. Maximum of two numbers in python

```
In [3]: num1=input('Enter first number:')
num2=input('Enter second number:')
if num1>=num2:
    if num1==num2:
        print('Both number are equal')
    else:
        print('First number is greater than second number')
else:
    print('second number is greater than first number')

Enter first number:5
Enter second number:4
First number is greater than second number
```

4.Python program for factorial of a number

```
In [6]: n=int(input('Enter a number:'))
factorial=1
if n>=1:
    for i in range(1,n+1):
        factorial=factorial*i
    print('Factorial of given number is:',factorial)

Enter a number:5
Factorial of given number is: 120
```

5. Python program for simple interest

```
In [1]: P=int(input('Enter the amount:'))
R=int(input('Enter the rate:'))
T=int(input('Enter the time:'))
Simple_interest=(P*R*T)/100
print('The simple interest is:',Simple_interest)

Enter the amount:1000
Enter the rate:10
Enter the time:4
The simple interest is: 400.0
```

6. Python program for Compound interest.

```
In [3]: P=float(input('Enter the principal amount:'))
T=float(input('Enter the number of years:'))
R=float(input('Enter the rate of interest:'))
Compound_interest=P*(pow((1+R/100),T))
print('The compound interest is:',Compound_interest)

Enter the principal amount:2000
Enter the number of years:4
Enter the rate of interest:10
The compound interest is: 2928.2000000000007
```

7. Python program to check Armstrong number.

```
In [5]: num=int(input('Enter a number:'))
sum=0
temp=num
while temp>0:
    r=temp%10
    sum=sum+(r*r*r)
    temp=temp//10
if num==sum:
    print(num,'is a Armstrong number')
else:
    print(num,'is not a Armstrong number')

Enter a number:153
153 is a Armstrong number
```

8. Python program to find area of circle.

```
In [7]: PI=3.14
r=float(input('Enter the radius of a circle:'))
area = PI*r*r
print('Area of a circle is:',area)

Enter the radius of a circle:4
Area of a circle is: 50.24
```

9. Python program to print all prime numbers in an interval

```
In [2]: lower_value = int(input('please enter the lower range value:'))
upper_value = int(input('please enter the upper range value:'))
print('The prime number in the range are:')
for num in range(lower_value,upper_value+1):
    if num>1:
        for i in range(2,num):
            if(num%i)==0:
                break
        else:
            print(num)

please enter the lower range value:10
please enter the upper range value:50
The prime number in the range are:
11
13
17
19
23
29
31
37
41
43
47
```

10. Python program to check whether a number is prime or not.

```
In [5]: num=int(input('Enter any number:'))
if num >1:
    for i in range(2,num):
        if(num%i)==0:
            print(num,'is not a prime number')
            break
    else:
        print(num,'is a prime number')
else:
    print(num,'is not a prime number')

Enter any number:13
13 is a prime number
```

```
In [ ]:
```