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

```
def find_numbers(lower_bound, upper_bound):

  results=[]

  for i in range(lower_bound,upper_bound):

    if (i % 7 == 0 and i % 5 !=0):
        results.append(i)
    return results

lower_bound = int( input("Lower bound to search for numbers: ") )

upper_bound = int( input("Upper bound to search for numbers: ") )

found_numbers = find_numbers(lower_bound, upper_bound)

print("The numbers that are divisible by 7 but not by 5

are:\n{}".format(found_numbers))
```

2. **Python program to add two numbers**

```
num1 = 1.5
num2 = 6.3

# Add two numbers
sum = num1 + num2

# Display the sum
print('The sum of {0} and {1} is {2}'.format(num1, num2, sum))
```

3. **Maximum of two numbers in Python**

```
def maximum(a, b):

        if a >= b:
                return a
        else:
```

```
        return b

# Driver code
a = 2
b = 4
print(maximum(a, b))
```

4. **Python Program for factorial of a number**

```
num = int(input("Enter a number: "))
factorial = 1
if num < 0:
   print(" Factorial does not exist for negative numbers")
elif num == 0:
   print("The factorial of 0 is 1")
else:
   for i in range(1,num + 1):
       factorial = factorial*i
   print("The factorial of",num,"is",factorial)
```

5. **Python Program for simple interest**

```
def simple_interest(p,t,r):
        print('The principal is', p)
        print('The time period is', t)
        print('The rate of interest is',r)

        si = (p * t * r)/100

        print('The Simple Interest is', si)
        return si

simple_interest(8, 6, 8)
```

6. **Python Program for compound interest**

```
def compound_interest(principle, rate, time):

        # Calculates compound interest
        Amount = principle * (pow((1 + rate / 100), time))
        CI = Amount - principle
        print("Compound interest is", CI)
compound_interest(10000, 10.25, 5)
```

7. **Python Program to Check Armstrong Number**

```
num = int(input("Enter a number: "))
sum = 0
temp = num
while temp > 0:
   digit = temp % 10
   sum += digit ** 3
   temp //= 10

# display the result
if num == sum:
   print(num,"is an Armstrong number")
else:
   print(num,"is not an Armstrong number")
```

8. **Python Program for Program to find the area of a circle**

```
import math

def area_of_the_circle (Radius):
    area = Radius** 2 * math.pi
    return area

Radius = float (input ("Please enter the radius of the given circle: "))
print (" The area of the given circle is: ", area_of_the_circle (Radius))
```

9. **Python program to print all Prime numbers in an Interval**

```
lower = 900
```

```
upper = 1000

print("Prime numbers between", lower, "and", upper, "are:")

for num in range(lower, upper + 1):
   # all prime numbers are greater than 1
   if num > 1:
      for i in range(2, num):
         if (num % i) == 0:
            break
      else:
         print(num)
```

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

```
num = 11

if num > 1:

        for i in range(2, int(num/2)+1):

                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")
```