```python
# Python program to find the factorial of a number.


num = 5
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)


# Python program to add two number.


num1 = 5
num2 = 5


sum = num1 + num2


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


# python program to check if given number is ODD or EVEN.
```

```python
num = int(input("Enter a number:"))

if(num % 2) == 0:

    print("{0} is Even".format(num))

else:

    print("{0} is Odd".format(num))


# Python program to check if year is a leap year or not


year = 2020


if (year % 4) == 0:

    if (year % 100) == 0:

        if (year % 400) == 0:

            print("{0} is a leap year".format(year))

        else:

            print("{0} is not a leap year".format(year))

    else:

        print("{0} is a leap year".format(year))

else:

    print("{0} is not a leap year".format(year))


# Python Program for simple interest


P = float(input("Enter the principal amount : "))

N = float(input("Enter the number of years : "))
```

```python
R = float(input("Enter the rate of interest : "))


SI = (P * N * R)/100

print("Simple interest : {}".format(SI))


# Python Program for compound interest


def compound_interest(principle, rate, time):

    CI = principle * (pow((1 + rate / 100), time))

    print("Compound interest : ", CI)
# main
compound_interest(10000, 12, 5)


# Python program to print all Prime numbers in an Interval


lower = 1
upper = 100


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


for num in range(lower, upper + 1):
    if num > 1:
        for i in range(2, num):
            if (num % i) == 0:
                break
```

```python
    else:

        print(num)


# Program to check if a number is prime or not


num = int(input("Enter a number: "))


if num > 1:
  for i in range(2,num):
    if (num % i) == 0:
        print(num,"is not a prime number")
        print(i,"times",num//i,"is",num)
        break
  else:
    print(num,"is a prime number")
else:
  print(num,"is not a prime number")


# Python Program to find the ASCII value of a character


ch = input("Enter any character: ")


print("The ASCII value of char " + ch + " is: ",ord(ch))


# Python Program for Volume and Surface Area of Cube
```

```python
pi=22/7

radian = float(input('Radius of sphere: '))

sur_area = 4 * pi * radian **2

volume = (4/3) * (pi * radian ** 3)

print("Surface Area is: ", sur_area)

print("Volume is: ", volume)


# Python program to check whether the entered character is vowel or consonant.


l = input("Input a letter of the alphabet: ")


if l in ('a', 'e', 'i', 'o', 'u'):

        print("%s is a vowel." % l)
elif l == 'y':

        print("Sometimes letter y stand for vowel, sometimes stand for consonant.")
else:

        print("%s is a consonant." % l)
```