BASIC PYTHON PROGRAM

```
#Addition of two number

num1=30
num2=40

print("the sum of two number is:",num1+num2)
```

```
the sum of two number is: 70
```

```
#Another method

number1=30
number2=40

sum=number1+number2

print("the sum of 2 number is:",sum)
```

```
the sum of 2 number is: 70
```

```
num1=int(input("Enter the num1:"))
num2=int(input("Enter the num2:"))

sum=num1+num2

print("the sum of 2 number is:",sum)
```

```
Enter the num1: 20
Enter the num2: 30

the sum of 2 number is: 50
```

```
# Find Square Root

num1=64

sq=num1**(1/2)

print("the squarerrot of given no is:",+sq)
```

```
the squarerrot of given no is: 8.0
```

```
num1=int(input("enter the num1:"))
sq=num1**(1/2)
print("the square root of given no is:",sq)
```

```
enter the num1: 81

the square root of given no is: 9.0
```

#Swapping two no

```
P = int( input("Please enter value for P: "))
Q = int( input("Please enter value for Q: "))


temp = P
P = Q
Q = temp

print ("The Value of P after swapping: ", P)
print ("The Value of Q after swapping: ", Q)
```

```
Please enter value for P:  10
Please enter value for Q:  20

The Value of P after swapping:  20
The Value of Q after swapping:  10
```

check no Postive,Negative or zero

```
def NumberCheck(a):

    if a > 0:
        print("Number given by you is Positive")

    elif a < 0:
        print("Number given by you is Negative")

    else:
        print("Number given by you is zero")

a = float(input("Enter a number as input value: "))

NumberCheck(a)
```

```
Enter a number as input value:  1

Number given by you is Positive
```

Even Or odd no

```
num = int(input("Enter a number: "))
if (num % 2) == 0:
   print("Even number")
else:
   print("Odd number")
```

```
Enter a number:  1
```

```
Odd number
```

Leap year

```
def CheckLeap(Year):

  if((Year % 400 == 0) or
     (Year % 100 != 0) and
     (Year % 4 == 0)):
    print("Given Year is a leap Year");

  else:
    print ("Given Year is not a leap Year")

Year = int(input("Enter the year: "))

CheckLeap(Year)
```

```
Enter the year:  2004

Given Year is a leap Year
```

Prime number or not

```
def PrimeChecker(a):

    if a > 1:

        for j in range(2, int(a/2) + 1):

            if (a % j) == 0:
                print(a, "is not a prime number")
                break

        else:
            print(a, "is a prime number")

    else:
        print(a, "is not a prime number")

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

PrimeChecker(a)
```

```
Enter an input number: 3

3 is a prime number
```

Factorial no

```
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)
```

```
Enter a number:  5
```

```
The factorial of 5 is 120
```

```
i = 1
while i <= 5:
    j = 1
    while j <= i:
        print("*", end="")
        j = j + 1
    print()
    i = i + 1
```

```
*
**
***
****
*****
```

```
i = 1
while i <= 5:
    j = 1
    while j <= i:
        print(i, end="")
        j = j + 1
    print()
    i = i + 1
```

```
1
22
333
4444
55555
```

```
i = 1
while i <= 5:
    j = 1
    while j <= i:
        print(j, end="")
        j = j + 1
```

```
    print()
    i = i + 1
```

```
1
12
123
1234
12345
```

DATE AND TIME

```
import datetime


current_time = datetime.datetime.now()

print("Time now at greenwich meridian is:", current_time)
```

```
Time now at greenwich meridian is: 2024-09-05 16:50:40.628333
```

Largest number in array

```
def largest(arr, n):


     max = arr[0]


     for i in range(1, n):
          if arr[i] > max:
               max = arr[i]
     return max



arr = [100, 300, 400, 900, 98]
n = len(arr)
Ans = largest(arr, n)
print("Largest in given array ", Ans)
```

```
Largest in given array  900
```