

In [1]: *#1.Program to find the sum and difference of input numbers*

```
n1 = int(input("Enter first number: "))
n2 = int(input("Enter second number: "))
print("Sum of", n1, "&", n2, "=", (n1+n2))
print("Difference of", n1, "&", n2, "=", (n1-n2))
```

```
Enter first number: 13
Enter second number: 11
Sum of 13 & 11 = 24
Difference of 13 & 11 = 2
```

In [2]: *#2.Program to find the maximum of three numbers*

```
n1 = int(input("Enter first number: "))
n2 = int(input("Enter second number: "))
n3 = int(input("Enter third number: "))
if n1==n2 and n2==n3:
    print("All entered numbers are same.\nPlease enter different numbers for comparison.")
elif n1>n2:
    if n1>n3:
        print("Maximum number is", n1)
    else:
        print("Maximum number is", n3)
else:
    if n2>n3:
        print("Maximum number is", n2)
    else:
        print("Maximum number is", n3)
```

```
Enter first number: 16
Enter second number: 8
Enter third number: 13
Maximum number is 16
```

In [1]: *#3.Program to check whether a given number is even or odd*

```
n = int(input("Enter a number: "))
if n%2==0:
    print(n, "is an even number.")
else:
    print(n, "is an odd number.")
```

```
Enter a number: 4
4 is an even number.
```

```
In [2]: #4.Program to print N Natural numbers
n = int(input("Enter the limit: "))
print("Natural numbers upto", n, ":")
for i in range(1,n+1):
    print(i)
```

```
Enter the limit: 10
Natural numbers upto 10 :
1
2
3
4
5
6
7
8
9
10
```

```
In [3]: #5.Program to find the sum and average of N natural numbers
n = int(input("Enter the limit: "))
sum = 0
for i in range(1,n+1):
    sum += i
avg = sum/n
print("Sum of natural numbers upto", n, "=", sum)
print("Average of natural numbers upto", n, "=", avg)
```

```
Enter the limit: 10
Sum of natural numbers upto 10 = 55
Average of natural numbers upto 10 = 5.5
```

```
In [4]: #6.Program to check whether a given number is prime or not
n = int(input("Enter a number: "))
count = 0
for i in range(1,n+1):
    if n%i==0:
        count += 1
if count==2:
    print(n, "is a prime number.")
else:
    print(n, "is not a prime number.")
```

Saumya Deep

Enter a number: 13
13 is a prime number.

```
In [5]: #7.Program to find all the factors of a given number
n = int(input("Enter a number: "))
print("Following are the factors of", n, ":")
for i in range(1,n+1):
    if n%i==0:
        print(i)
```

Enter a number: 8
Following are the factors of 8 :
1
2
4
8

```
In [6]: #8.Program to print Fibonacci series upto N
n = int(input("Enter the limit: "))
a = 0
b = 1
sum = 0
print("Fibonacci Series:\n",a,b,end=" ")
while sum<=n:
    sum = a+b
    if sum>=n:
        break;
    print(sum,end=" ")
    a = b
    b = sum
```

Enter the limit: 100
Fibonacci Series:
0 1 1 2 3 5 8 13 21 34 55 89