```
#Q.1 Write a program for arithmatic operators

a=30
b=20
print("addition : ",a+b)
print("subtraction : ",a-b)
print("multiplication : ",a*b)
print("division : ",a/b)
print("modulus : ",a%b)
print("floor division : ",a//b)
print("exponentation : ",a**b)
```

```
addition :  50
subtraction :  10
multiplication :  600
division :  1.5
modulus :  10
floor division :  1
exponentation :  348678440100000000000000000000
```

```
#Q.2 Write a program for assignment operators

x=50
print(x)
x+=3
print(x)
x-=1
print(x)
x*=2
print(x)
x/=5
print(x)
x%=2
print(x)
x//=4
print(x)
print(x:=4)
```

```
50
53
52
104
20.8
0.8000000000000007
0.0
4
```

```
#Q.3Write a program for Bitwise operators

print("AND : ", 6&3)
print("OR : ",6|3)
print("XOR : ",6^3)
print("NOT : ",~3)
print("left shift : ",6<<3)
print("right shift : ",6>>3)
```

```
AND :  2
OR :  7
XOR :  5
NOT :  -4
left shift :  48
right shift :  0
```

```
#Q.4 Write a program to calculate greatest of three numbers.

num1 = float(input("Enter the first number: "))
num2 = float(input("Enter the second number: "))
num3 = float(input("Enter the third number: "))

greatest = (num1 if num1 > num2 else num2) if (num1 if num1 > num2 else num2) > num3 else num3
print(f"The greatest of the three numbers is: {greatest}")
```

```
Enter the first number: 20
Enter the second number: 30
Enter the third number: 15
The greatest of the three numbers is: 30.0
```

```
#Calculate the area of a circle.

radius =float(input("Enter Radius : "))
area=3.14*radius*radius
print("Area of a circle is : ",area)
```

```
Enter Radius : 4
Area of a circle is :  50.24
```

```
#Calculate the area of a triangle.

a = float(input("Enter the length of the first side: "))
b = float(input("Enter the length of the second side: "))
c = float(input("Enter the length of the third side: "))

s = (a + b + c) / 2
area = (s * (s - a) * (s - b) * (s - c)) ** 0.5
print(f"The area of the triangle is: {area:.2f}")
```

```
Enter the length of the first side: 54
Enter the length of the second side: 34
Enter the length of the third side: 97
The area of the triangle is: 0.00+968.25j
```

```
#Calculate the area of a rectangle.

length = float(input("Enter the length : "))
breadth = float(input("Enter the breadth : "))
area = length * breadth
print(f"The area of the rectangle is: {area:.2f}")
```

```
Enter the length : 49
Enter the breadth : 58
The area of the rectangle is: 2842.00
```

```
#Calculate the area of a square.

side = float(input("Enter the side of square : "))
area = side * side
print(f"The area of the squale is: {area:.2f}")
```

```
Enter the side of square : 4
The area of the squale is: 16.00
```

```
#1. write a rogram to accept a number and dsiplay its square and cube.

num=int(input("enter a any number : "))
print(f"square root of {num} is {num**2}")
print(f"cube root of {num} is {num**3}")
```

```
enter a any number : 4
square root of 4 is 16
cube root of 4 is 64
```

```
#2. write a program to accept 5 float values and display its sum and average.

a =float(input("Enter the value 1: "))
b =float(input("Enter the value 2: "))
c =float(input("Enter the value 3: "))
d =float(input("Enter the value 4: "))
e =float(input("Enter the value 5: "))

Sum=a+b+c+d+e
avg=Sum/5
print(f"sum of 5 values is : {Sum}")
print(f"average of 5 values is : {avg:.2f}")
```

```
Enter the value 1: 1
Enter the value 2: 2
Enter the value 3: 3
Enter the value 4: 4
Enter the value 5: 5
sum of 5 values is : 15.0
average of 5 values is : 3.00
```

```
#3. write a program to calculate the area of rectangle.

length = float(input("Enter the length : "))
breadth = float(input("Enter the breadth : "))
area = length * breadth
print(f"The area of the rectangle is: {area:.2f}")
```

```
Enter the length : 20
Enter the breadth : 25
The area of the rectangle is: 500.00
```