PYTHON MODULE 1

1.Write a python program for the following problem statement

Read two integers from STDIN and print three lines where:

1. The first line contains the sum of the two numbers.
2. The second line contains the difference of the two numbers (first - second).
3. The third line contains the product of the two numbers.

For example:

Input	Result
9 4	13 5 36

PROGRAM:

```
a=int(input())
b=int(input())
print(a+b)
print(a-b)
print(a*b)
```

RESULT:

	Input	Expected	Got	
✔	9 4	13 5 36	13 5 36	✔
✔	10 3	13 7 30	13 7 30	✔

Passed all tests! ✔

2. write a python program to implement expression using bitwise and , or, not, ex-or, right shift and left shift operator. Read the values from the user.

For example:

Input	Result
10 4	0 14 -11 14 0 160

PROGRAM:

```
a=int(input())
b=int(input())
print(a&b)
print(a|b)
print(~a)
```

```
print(a^b)
print(a>>b)
print(a<<b)
```

RESULT:

	Input	Expected	Got	
✔	10 4	0 14 -11 14 0 160	0 14 -11 14 0 160	✔
✔	15 20	4 31 -16 27 0 15728640	4 31 -16 27 0 15728640	✔

Passed all tests! ✔

3.Write a Python Program to take two numbers as input from the user and then calculating the following with nested if statement.

1. check whether the number are equal or not.
2. find the largest of two numbers

For example:

Input	Result
6 3	A is not equal to B A is larger than B

Input	Result
7 7	A is equal to B

PROGRAM:

```
a=int(input())
b=int(input())
if a!=b:
   print("A is not equal to B")
   if(a>b):
    print("A is larger than B")
   else:
    print("B is larger than A")
else:
   print("A is equal to B")
```

RESULT:

	Input	Expected	Got	
✔	6 3	A is not equal to B A is larger than B	A is not equal to B A is larger than B	✔
✔	7 7	A is equal to B	A is equal to B	✔

Passed all tests! ✔

Correct

Marks for this submission: 2.00/2.00.

4. Write a Python program to read the input from the user and print the type of the literal.

Hint: Use eval()

For example:

Input	Result
1.78	<class 'float'>
(1,2,3)	<class 'tuple'>

PROGRAM:

```
a=eval(input())
print(type(a))
```

RESULT:

	Input	Expected	Got	
✔	1.78	<class 'float'>	<class 'float'>	✔
✔	(1,2,3)	<class 'tuple'>	<class 'tuple'>	✔
✔	[1,2,3]	<class 'list'>	<class 'list'>	✔

Passed all tests! ✔

5. Correct the python program to evaluate the following expression

a+b*c-a/b

For example:

Input	Result
4 2 6	14.0

PROGRAM:

```
a=int(input())
b=int(input())
c=int(input())
x=a+b*c-a/b
print(float(x))
```

RESULT:

	Input	Expected	Got	
✔	4 2 6	14.0	14.0	✔
✔	10 4 2	15.5	15.5	✔

Passed all tests! ✔