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Task-1 : Running python script and various expression in an interactive interpreter

a) Perform basic Mathematical operation

Aim : To write a program that takes two price value from the uses and perform basic mathematical computation such as division, addition, Subtraction, multiplication.

Algorithm :-

Step 1 : Start

Step 2 : Prompt the user to enter first price store it in price. 1.

Step 3 : prompt the user to enter second price store it in price 2.

Step 4 : calculate the total (price 1 + price 2)

Step 5 : calculate the difference (price 1 - price 2)

Step 6 : calculate the product (price 1 * price 2)

Step 7 : calculate the division (price 1 / price 2)

Step 8 : Display all the results

Step 9 : End

program :-

```
price 1 = float (input ("enter first price :");
price 2 = float (input ("enter second price :");
total = price 1 + price 2.
difference = price 1 - price 2
product = price 1 * price 2
division = price 1 / price 2
print ("Total :", total)
print ("difference :", difference)
print ("Product :", product)
print ("Division :", division)
```

Output :-

Enter the first price : 150

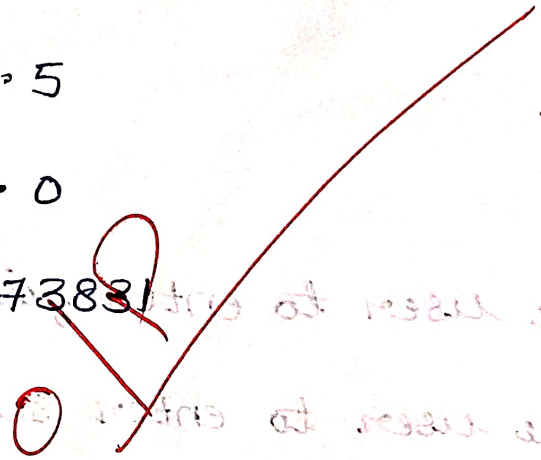
Enter second price : 53.5

Total : 203.5

Difference : 96.5

Product : 8025.0

Division : 2.80373831



**Result :-**

Thus program is successfully executed and accepts value from user and peryorms Mathematical Computation.

## b) Evaluate Relational Expression

**Aim:** A student grading system needs to compare two students' and scores for ranking purpose.

**Algorithm :-**

Step 1 : Start

step 2 : Input the score of student 1

Step 3 : Input the score of student 2

Step 4 : compare the two scores using relational operator (==, !=, >, <, >=, <=)

Step 5 : Display the results of each comparison

Step 6 : End

**program :-**

```
score a = float (input ("Enter score of student A :"))
score b = float (input ("Enter score of student B:"))
if score a > score b :
    print ("Student A ranks higher than Student B")
elif score a < score b :
    print ("Student B ranks higher than Student A")
else :
    print ("Both student have the same rank")
```

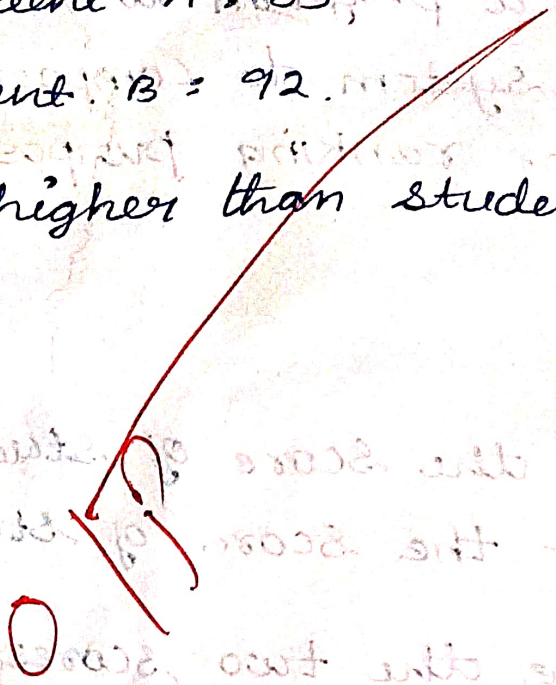
**Result:** Hence, executing a program for a student's score and comparing them is successfully completed.

Output

Enter score of student A : 85

Enter score of student B : 92

Student B ranks higher than student A.



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## c) Check Logical conditions across multiple Inputs

**Aim:** To determine if a candidate qualifies in three skill test using logical evaluation.

**Algorithm:**

**Step 1:** Start

**Step 2:** Input the result of Skill Test 1

**Step 3:** Input the result of Skill Test 2

**Step 4:** Input the result of Skill Test 3

**Step 5:** Use logical operator to check:
* If all test are passed → candidate qualifies
* Else → candidate does not qualify

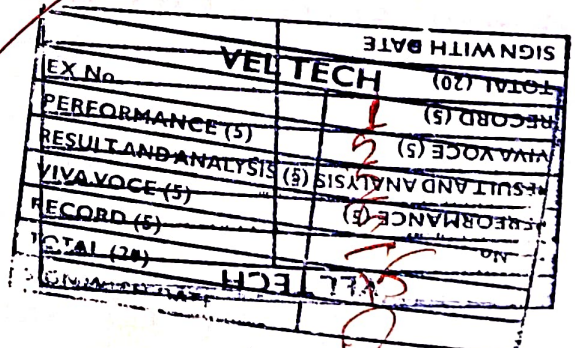
**Step 6:** Display the result

**Step 7:** End

**program:**

```
mark1 = int (input ("Enter marks for Skill Test 1:"))
mark 2 = int (input ("Enter marks for Skill Test 2:"))
mark 3 = int (input ("Enter marks for Skill Test 3:"))

 pass_mark = 40
if mark1 >= pass_mark and mark 2 >= pass_mark
                and mark 3 >= pass_mark :
 print ("Candidates qualifies in all Skill test")
else :
    print ("candidate does not qualify")
```




**Result:** Hence, creating a program to determine if a candidate qualifies in three skill test using logical evaluation.

Output :

Enter mark for skill test 1 : 45

Enter mark for skill test 2 : 50

Enter mark for skill test 3 : 42

Candidate qualifies in all skill tests