

14.Design of 2 stage pipeline for addition and subtraction of two numbers using any high level language.

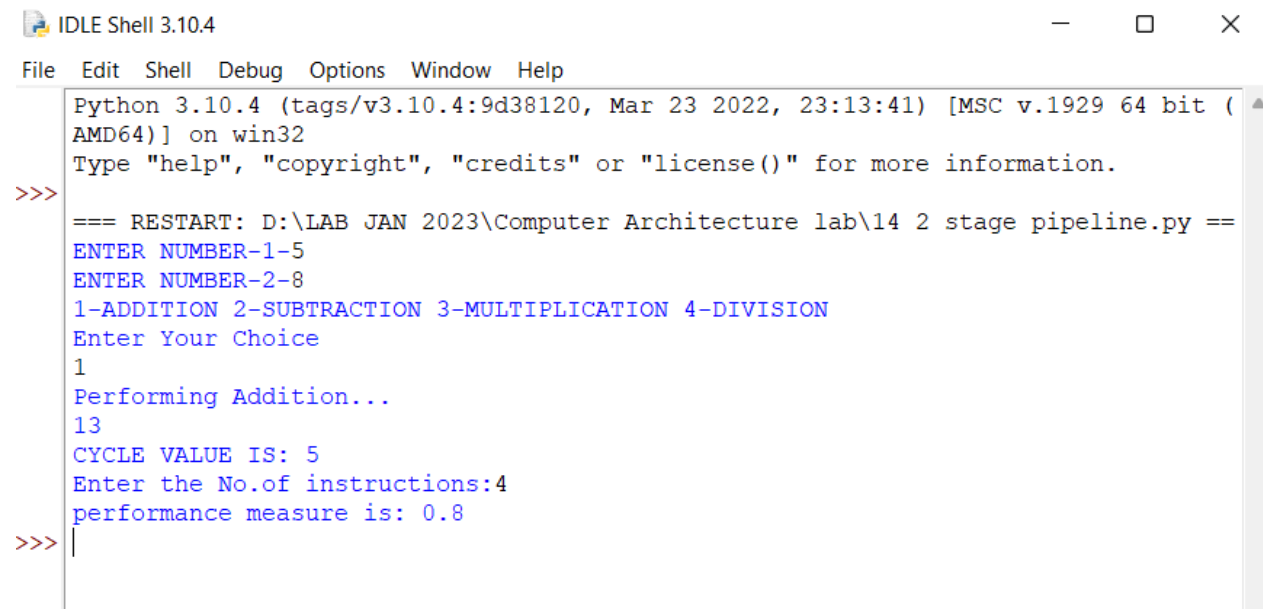
AIM:

To design 2 stage pipeline for addition and subtraction of two numbers using any high level language.

PROGRAM:

```
# 2 stage pipeline in python
counter=1
a=int(input("ENTER NUMBER-1-"))
counter=counter+1
b=int(input("ENTER NUMBER-2-"))
counter=counter+1
print("1-ADDITION 2-SUBTRACTION 3-MULTIPLICATION 4-DIVISION")
print("Enter Your Choice")
choice=int(input())
if choice==1:
    print("Performing Addition...")
    res=a+b
    counter=counter+1
if choice==2:
    print("Performing Subtraction...")
    res=a-b
    counter=counter+1
if choice==3:
    print("Performing Multiplication")
    res=a*b
    counter=counter+1
if choice==4:
    if b==0:
        print("Denominator can't be Zero")
        print("Performing Division")
        res=a/b
        counter=counter+1
if choice>=5:
    print("Enter Correct Input")
print(res)
counter=counter+1
print("CYCLE VALUE IS:",counter)
ins=int(input("Enter the No.of instructions:"))
performance_measure =ins/counter
print("performance measure is:",performance_measure)
```

OUTPUT:



```
Python 3.10.4 (tags/v3.10.4:9d38120, Mar 23 2022, 23:13:41) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
=== RESTART: D:\LAB JAN 2023\Computer Architecture lab\14 2 stage pipeline.py ===
ENTER NUMBER-1-5
ENTER NUMBER-2-8
1-ADDITION 2-SUBTRACTION 3-MULTIPLICATION 4-DIVISION
Enter Your Choice
1
Performing Addition...
13
CYCLE VALUE IS: 5
Enter the No.of instructions:4
performance measure is: 0.8
>>> |
```

RESULT: Successfully executed 2 stage pipeline for addition and subtraction of two numbers using any high level language.