

16.Design of 4 stage pipeline for multiplication and division of two numbers using any high level language.

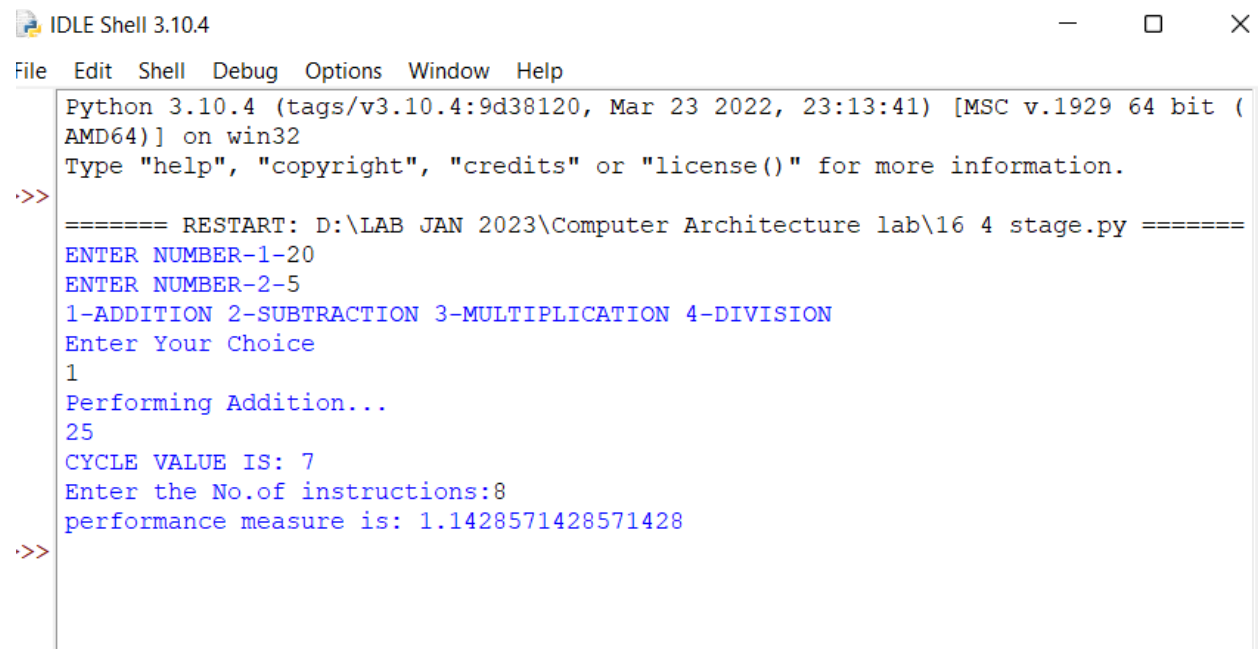
AIM:

To design 4 stage pipeline for multiplication and division of two numbers using high level language.

PROGRAM:

```
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+3
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\16 4 stage.py =====
ENTER NUMBER-1-20
ENTER NUMBER-2-5
1-ADDITION 2-SUBTRACTION 3-MULTIPLICATION 4-DIVISION
Enter Your Choice
1
Performing Addition...
25
CYCLE VALUE IS: 7
Enter the No.of instructions:8
performance measure is: 1.1428571428571428
>>>
```

RESULT:

Successfully executed 4 stage pipeline for multiplication and division of two numbers using high level language.