

15. Design of 3 stage pipeline for AND, OR, NAND of two numbers using any high level language.

Program::

```
a=int(input("enter number 1 :"))
```

```
b=int(input("enter number 2 :"))
```

```
c=4
```

```
rand=a&b
```

```
ror=a/b
```

```
rnand=rand
```

```
print("the cycle value is",c)
```

```
ins=int(input("ennter no of instruction="))
```

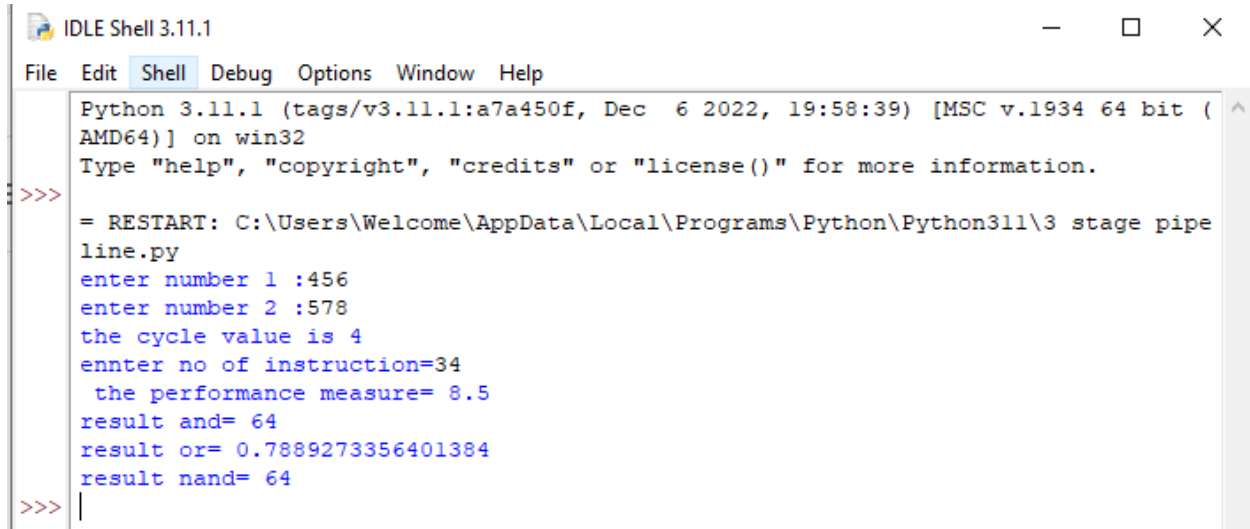
```
print(" the performance measure=",ins/c)
```

```
print("result and=",rand)
```

```
print("result or=",ror)
```

```
print("result nand=",rnand)
```

OUTPUT::

A screenshot of the Python IDLE Shell 3.11.1 window. The window has a title bar with standard Windows controls (minimize, maximize, close) and a menu bar with 'File', 'Edit', 'Shell', 'Debug', 'Options', 'Window', and 'Help'. The 'Shell' menu is currently selected. The main text area displays the Python 3.11.1 startup message, including the version, build tags, and architecture. Below this, a series of blue-colored text prompts and user inputs are shown, representing a program execution. The prompts include 'enter number 1', 'enter number 2', 'the cycle value is', 'ennter no of instruction', 'the performance measure', 'result and', 'result or', and 'result nand'. The user has entered '456', '578', '4', '34', '8.5', '64', '0.7889273356401384', and '64' respectively. The prompt 'ennter' appears to be a typo for 'enter'. The window also features a vertical scrollbar on the right side.

```
Python 3.11.1 (tags/v3.11.1:a7a450f, Dec 6 2022, 19:58:39) [MSC v.1934 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: C:\Users\Welcome\AppData\Local\Programs\Python\Python311\3 stage pipe
line.py
enter number 1 :456
enter number 2 :578
the cycle value is 4
ennter no of instruction=34
the performance measure= 8.5
result and= 64
result or= 0.7889273356401384
result nand= 64
>>> |
```