

Question 1

```
vector_zero x
C:\Users\nmura_aj5b5a\Pycharm\pyProjects\Scripts\python.exe C:/Users/nmura_aj5b5a/PycharmProjects/Cognizance/vector_zero.py
enter the first number: 10
enter the second number: 14
[10 11 12 13 14]
enter the no. of zeros interleaved: 5

[10.  0.  0.  0.  0.  0. 11.  0.  0.  0.  0.  0. 12.  0.  0.  0.  0.  0.
 13.  0.  0.  0.  0.  0. 14.]

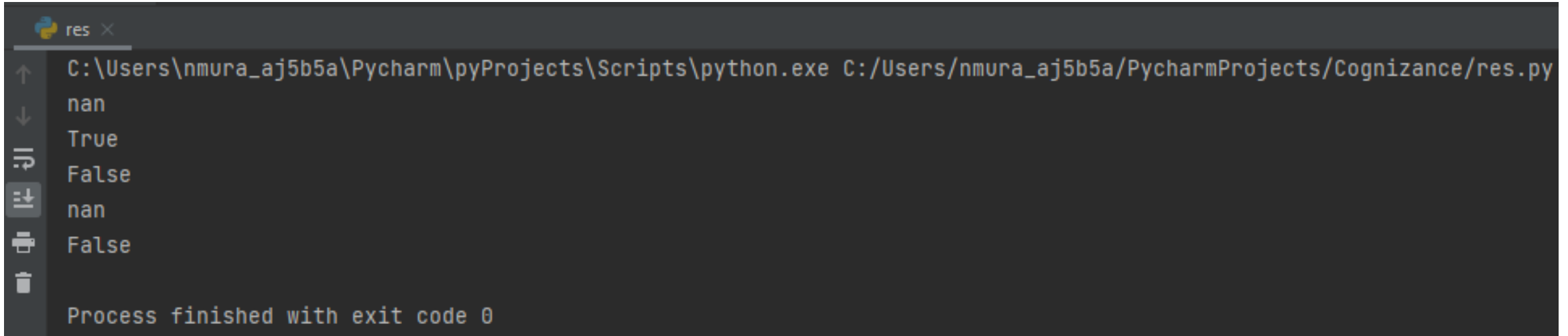
Process finished with exit code 0
|
```

Question 2

```
eq_array x
C:\Users\nmura_aj5b5a\Pycharm\pyProjects\Scripts\python.exe C:/Users/nmura_aj5b5a/PycharmProjects/Cognizance/eq_array.py
[2 1 1 1 1 2]
[1 0 0 0 2 2]
False

Process finished with exit code 0
```

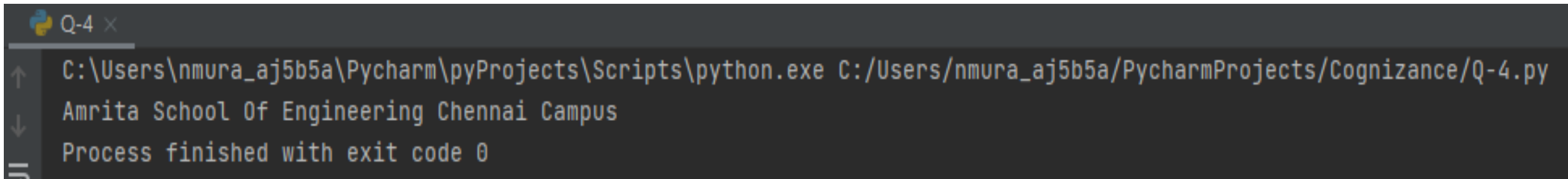
Question 3



A screenshot of a PyCharm terminal window titled 'res x'. The terminal shows the execution of a Python script at the path 'C:\Users\nmura_aj5b5a\Pycharm\pyProjects\Scripts\python.exe C:/Users/nmura_aj5b5a/PycharmProjects/Cognizance/res.py'. The output consists of five lines: 'nan', 'True', 'False', 'nan', and 'False'. The terminal interface includes a vertical toolbar on the left with icons for navigation and execution. At the bottom, a status message reads 'Process finished with exit code 0'.

```
res x
C:\Users\nmura_aj5b5a\Pycharm\pyProjects\Scripts\python.exe C:/Users/nmura_aj5b5a/PycharmProjects/Cognizance/res.py
nan
True
False
nan
False
Process finished with exit code 0
```

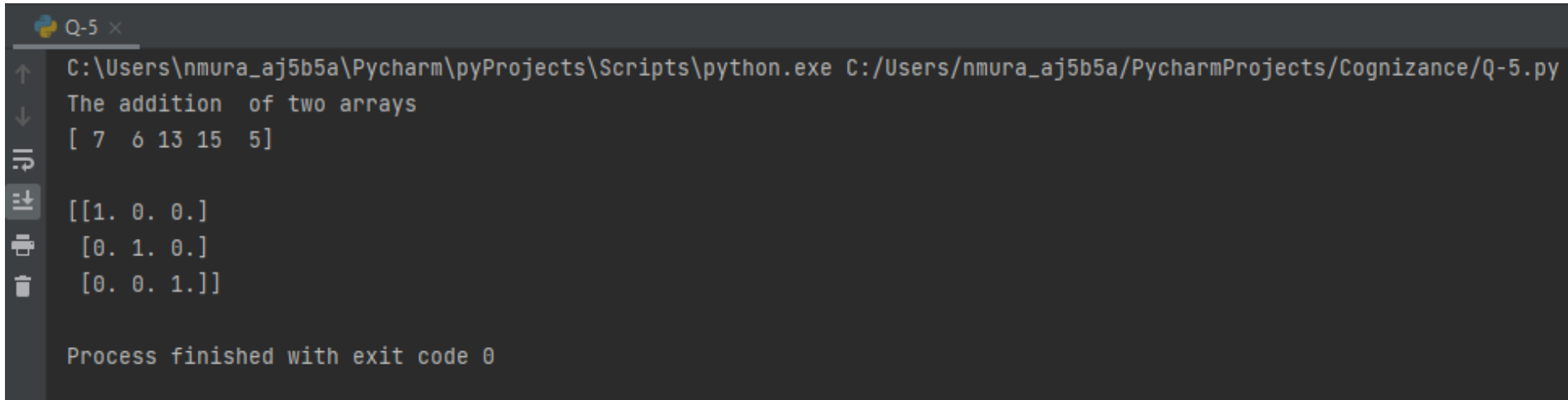
Question 4



A screenshot of a PyCharm terminal window titled 'Q-4 x'. The terminal shows the execution of a Python script at the path 'C:\Users\nmura_aj5b5a\Pycharm\pyProjects\Scripts\python.exe C:/Users/nmura_aj5b5a/PycharmProjects/Cognizance/Q-4.py'. The output consists of two lines: 'Amrita School Of Engineering Chennai Campus' and 'Process finished with exit code 0'. The terminal interface includes a vertical toolbar on the left with icons for navigation and execution.

```
Q-4 x
C:\Users\nmura_aj5b5a\Pycharm\pyProjects\Scripts\python.exe C:/Users/nmura_aj5b5a/PycharmProjects/Cognizance/Q-4.py
Amrita School Of Engineering Chennai Campus
Process finished with exit code 0
```

Question 5



The screenshot shows a PyCharm terminal window with a dark theme. The title bar at the top reads "Q-5 x". The terminal content shows the command to run a Python script, the output of the script, and the final exit status.

```
C:\Users\nmura_aj5b5a\Pycharm\pyProjects\Scripts\python.exe C:/Users/nmura_aj5b5a/PycharmProjects/Cognizance/Q-5.py
The addition of two arrays
[ 7  6 13 15  5]

[[1. 0. 0.]
 [0. 1. 0.]
 [0. 0. 1.]]

Process finished with exit code 0
```