

## OUTPUT FILE

Q1.

Output screenshot: -

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
[Code] [+] [ ] [ ] [ ] [ ] [ ]

Original array:
['10' '11' '12' '13' '14']

New array:
[10. 0. 0. 0. 0. 0. 11. 0. 0. 0. 0. 12. 0. 0. 0. 0. 0.
 13. 0. 0. 0. 0. 0. 14.]

PS D:\task>
Ln 9, Col 6 Spaces: 4 UTF-8 CRLF Python Prettier

```

Q2.

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
enter the length of first array3
Enter the length of second array3
Enter the element of first array
12
15
10
Enter the element of second array
12
18
15
['10' '12' '15'] <class 'numpy.ndarray'>
['12' '15' '18'] <class 'numpy.ndarray'>
False
PS D:\task-8>

```

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
enter the length of first array3
Enter the length of second array3
Enter the element of first array
12
15
10
Enter the element of second array
10
15
12
['10' '12' '15'] <class 'numpy.ndarray'>
['10' '12' '15'] <class 'numpy.ndarray'>
True
PS D:\task-8>

```

Q3

```
PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL
PS D:\task-8> python -u "d:\task-8\q3.py"
nan
True
False
nan
False
PS D:\task-8>
```

Ln 3, Col 24 Spaces: 4 UTF-8 CRLF Python Prettier

Q4.

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
['amrita', 'school', 'of', 'engineering', 'chennai', 'campus']
0      Amrita
1      School
2      of
3      Engineering
4      Chennai
5      Campus
dtype: object
PS D:\task-8>
```

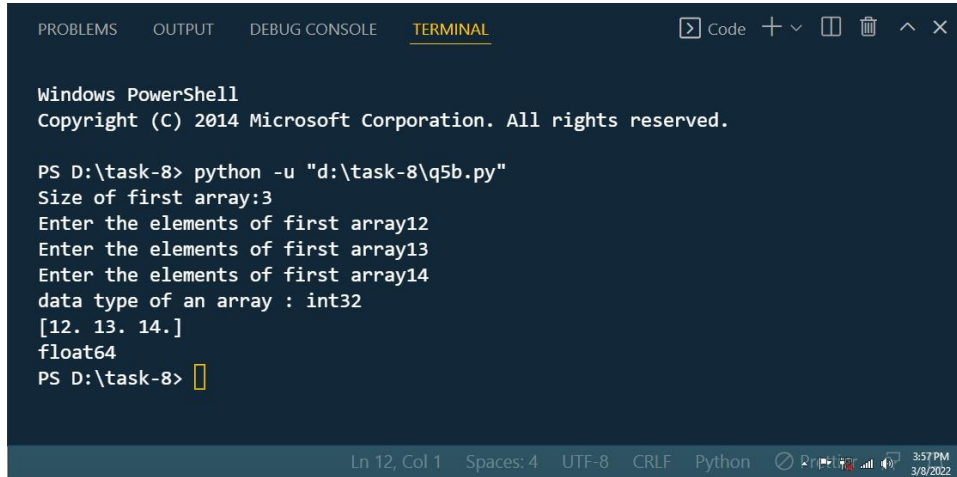
Q5a.

**addition of 2 numpy arrays**

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
PS D:\task-8> python -u "d:\task-8\q5a.py"
Size of first array:3
Size of second array:3
Enter the elements of first array10
Enter the elements of first array11
Enter the elements of first array12
Enter the elements of second array13
Enter the elements of second array14
Enter the elements of second array15
Added array [23 25 27]
PS D:\task-8>
```

Q5b.

## Array datatype conversion



```
Windows PowerShell
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PS D:\task-8> python -u "d:\task-8\q5b.py"
Size of first array:3
Enter the elements of first array12
Enter the elements of first array13
Enter the elements of first array14
data type of an array : int32
[12. 13. 14.]
float64
PS D:\task-8>
```

The screenshot shows a Windows PowerShell terminal window with a dark blue background. The title bar at the top includes tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, and TERMINAL (which is active). To the right of the tabs are icons for Code, a plus sign, a minus sign, a window icon, a trash icon, and up/down arrows. The terminal content shows the execution of a Python script. It starts with the PowerShell prompt, followed by the command to run a Python script. The script outputs the size of the first array (3), prompts for three elements (12, 13, 14), displays the resulting array [12. 13. 14.], and shows the data type conversion from int32 to float64. The status bar at the bottom indicates the current cursor position (Ln 12, Col 1), indentation (Spaces: 4), encoding (UTF-8), line endings (CRLF), the active language (Python), and system icons including a network icon, a battery icon, and the time (3:57 PM) and date (3/8/2022).