

TASK-8

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Q1. `[10. 0. 0. 0. 0. 0. 11. 0. 0. 0. 0. 12. 0. 0. 0. 0. 0.
13. 0. 0. 0. 0. 0. 14.]`
`>>>`

Q2. `First Array: [1 0 0 0 1 0]
Second Array: [0 0 1 1 0 1]
False`

Q3. `Result for print(0 * np.nan)
nan

Result for print(np.nan != np.nan)
True

Result for print(np.inf > np.nan)
False

Result for print(np.nan - np.nan)
nan

Result for print(0.3 == 3 * 0.1)
False`

Q4. Given Series :

```
0      amrita
1      school
2      of
3      engineering
4      chennai
5      campus
dtype: object
```

After capitalizing : Amrita School Of Engineering Chennai Campus

Q5. 2. Multiplying a matrix

First Array :

```
[[1 2 3]
 [4 5 6]
 [7 8 9]]
```

Shape : (3, 3)

Second Array :

```
[[1 0 0]
 [0 1 0]
 [0 0 1]]
```

Shape : (3, 3)

A X B =

```
[[1 2 3]
 [4 5 6]
 [7 8 9]]
```

5. Re-Dimensioning an array

Before Re-Dimensioning :

```
[[1 2 3 4]
 [5 6 7 8]]
```

Shape : (2, 4)

After Re-Dimensioning :

```
[[1 2]
 [3 4]
 [5 6]
 [7 8]]
```

Shape : (4, 2)