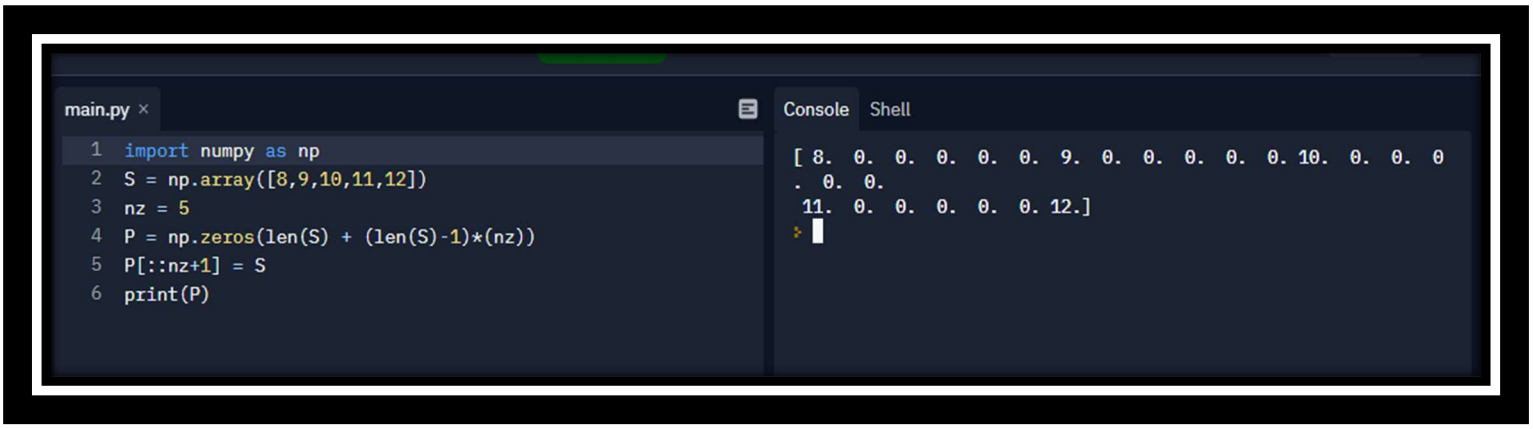
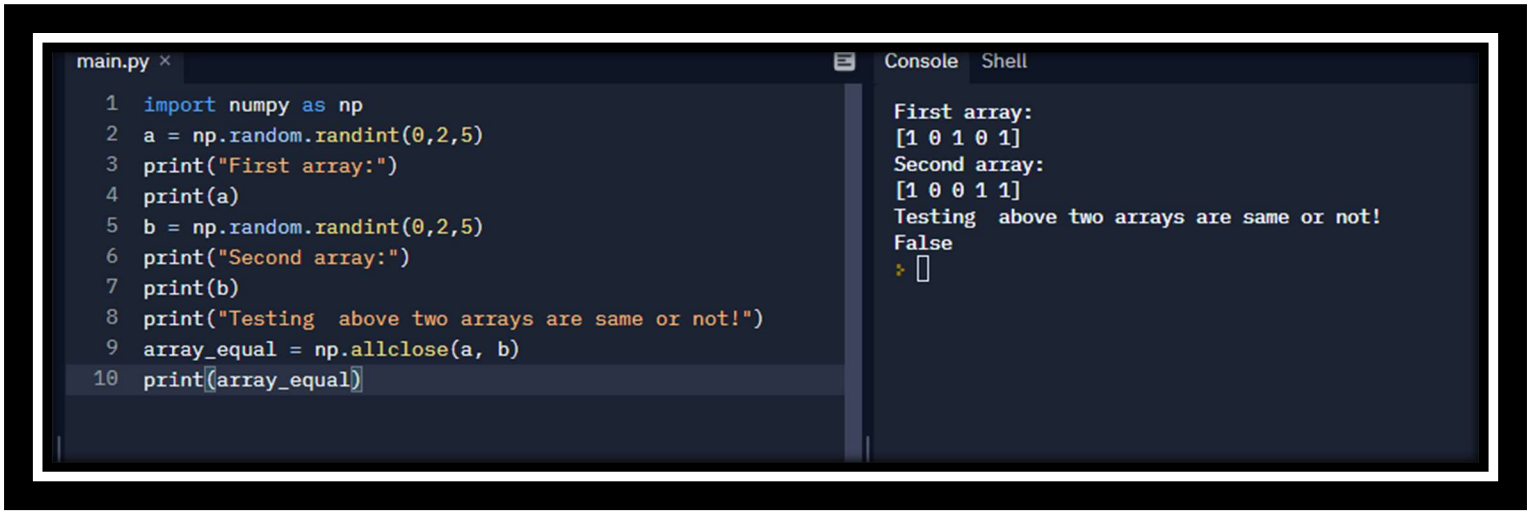
OUTPUT

Q.NO 1



Q.NO 2



Q.NO 3

main.py

```
import numpy as np
print(0 * np.nan)
print(np.nan != np.nan)
print(np.inf > np.nan)
print(np.nan - np.nan)
print(0.3 == 3 * 0.1)
```

Console Shell

```
nan
True
False
nan
False
```

Q.NO 4

main.py

```
import pandas as pd
ser = pd.Series(['amrita', 'school', 'of',
'engineering', 'chennai', 'campus'])
Series = ser.str.title()
print(Series)
```

Console Shell

```
0         Amrita
1         School
2             Of
3    Engineering
4        Chennai
5         Campus
dtype: object
```

Q.NO 5-1

main.py

```
1
2  import numpy as np
3
4  a = np.array([2, 2, 2,2,2])
5  b = np.array([6, 6, 6,6,6])
6
7  print ("Array 1 : ", a)
8  print ("\nArray 2 : ", b)
9
10 out_ab = np.add(a, b)
11 print ("\nFinal   : ", out_ab)
```

Console Shell

```
Array 1 :  [2 2 2 2 2]

Array 2 :  [6 6 6 6 6]

Final   :  [8 8 8 8 8]
```

Q.NO 5-3

ain.py

```
1 import numpy as sai
2 b = sai.identity(2, dtype = float)
3 print("Matrix b : \n", b)
4 p = sai.identity(4)
5 print("\nMatrix p: \n", p)
6
```

Console Shell

```
Matrix b :
 [[1. 0.]
 [0. 1.]]

Matrix p:
 [[1. 0. 0. 0.]
 [0. 1. 0. 0.]
 [0. 0. 1. 0.]
 [0. 0. 0. 1.]]
```