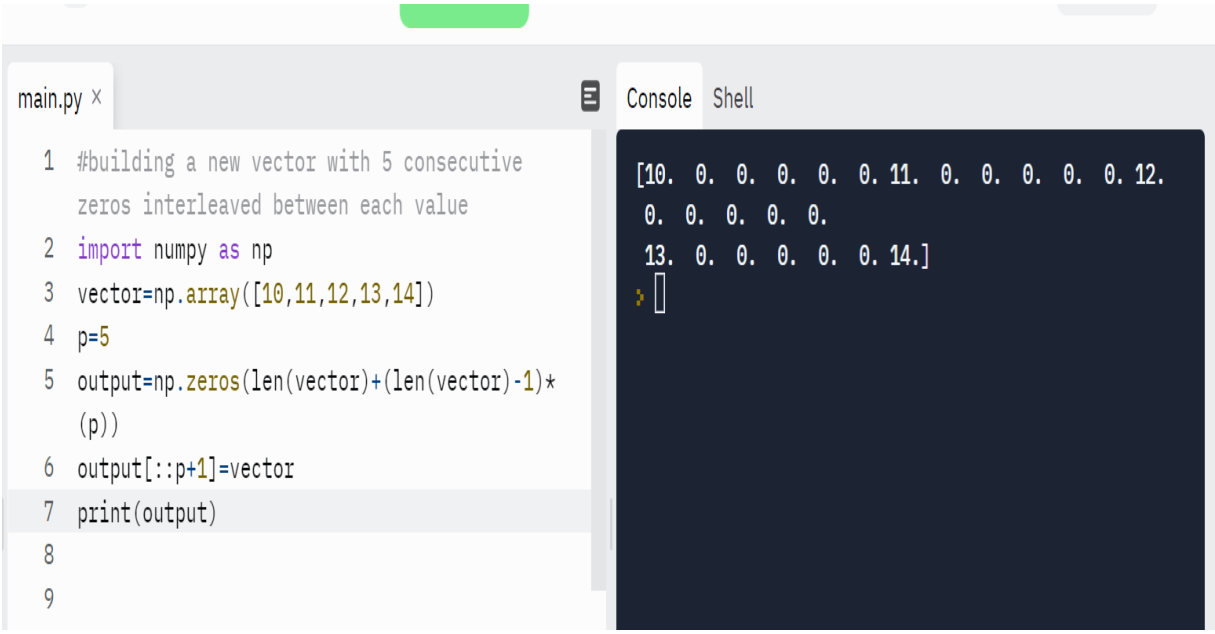
TASK-8

Sahasra Reddy

Ch.en.cys21037

Question 1:



Question-2:

main.py

```
import numpy as np
#user inputing  the elements of 1st array
elements1=int(input("enter the no.of elements of 1st array "))
a=np.zeros(elements1)
u=len(a)
i=0
while i<u:
    x=int(input("enter the element "))
    a[i]=x
    i+=1
print(a)
#user inputing the elements of 2nd array
elements2=int(input("enter the no.of.elements of 2nd array "))
b=np.zeros(elements2)
v=len(b)
j=0
while j<v:
```

Console Shell

```
enter the no.of elements of 1st array 3
enter the element 1
enter the element 2
enter the element 3
[1. 2. 3.]
enter the no.of.elements of 2nd array 3
enter the element 2
enter the element 3
enter the element 4
[2. 3. 4.]
False
```

Question-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
```

Question-4:

main.py

```
#converting 1st character of each element to
uppercase
import pandas as pd
words=pd.Series(['amrita','school','of','engineering'
,'chennai','campus'])
uppercase=words.str.title()
print(uppercase)
```

Console Shell

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

Question 5(i):

main.py

```
# addition of 2 numpy arrays
import numpy as np
a=np.array([[1,2,3,4],[5,6,7,8]])
b=np.array([[1,3,2,4],[5,7,6,8]])
print(a+b)
```

Console Shell

```
[[ 2  5  5  8]
 [10 13 13 16]]
```

Question-5(iii):