

Question – 1:

```
Q1.py x
1  n1 = int(input("First number: "))
2  n2 = int(input("Last number: "))
3  n = n1
4  o = []
5  while n <= n2:
6      o = o + [n]
7      if n != n2:
8          o = o + [0]*5
9      n = n + 1
10 print(o)
```

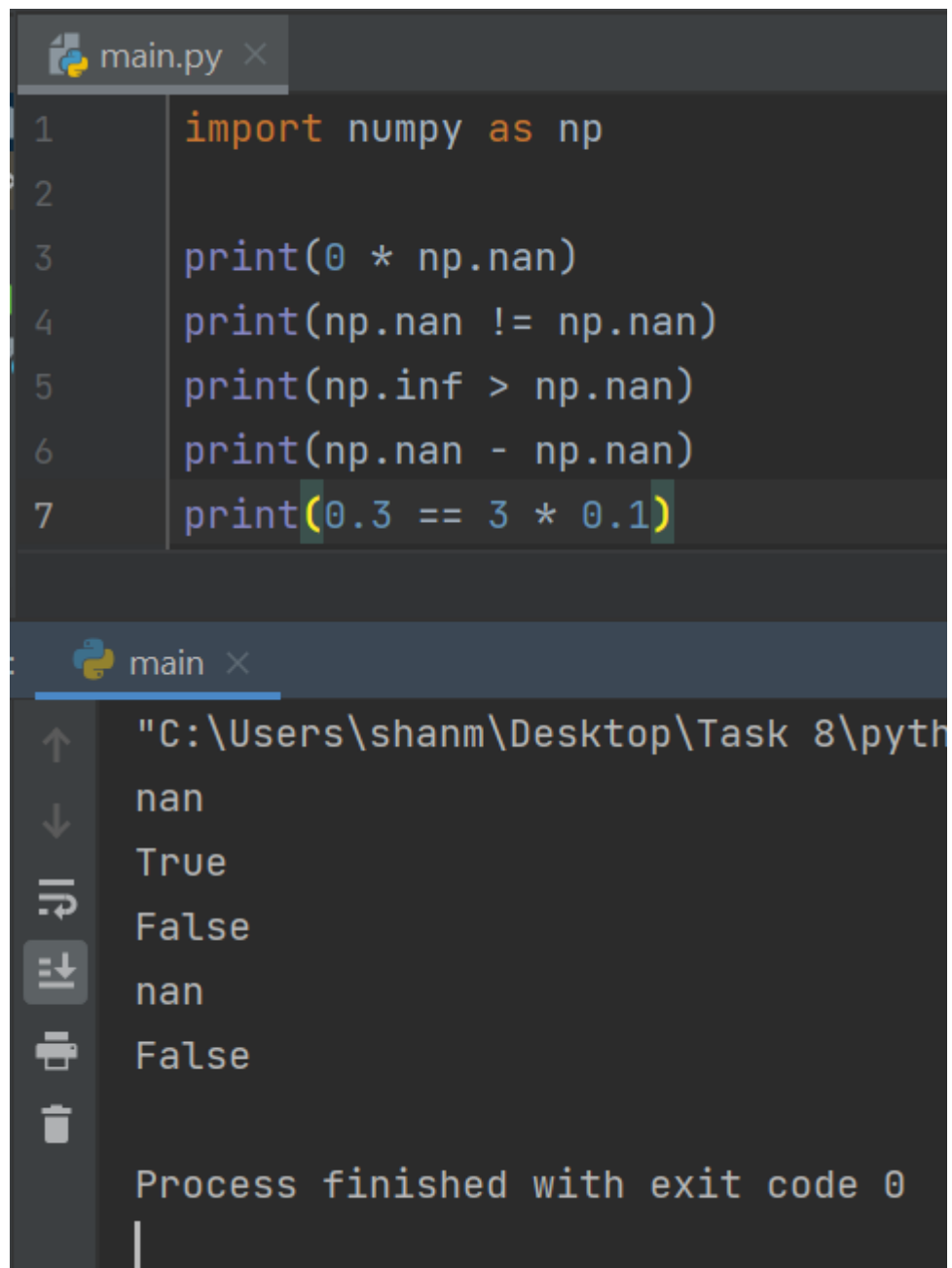
```
Q1 x
"C:\Users\shanm\Desktop\Task 8\pythonProject2\venv\Scripts\python.exe" "C:/Users/
First number: 10
Last number: 14
[10, 0, 0, 0, 0, 0, 0, 11, 0, 0, 0, 0, 0, 0, 12, 0, 0, 0, 0, 0, 0, 13, 0, 0, 0, 0, 0, 14]
Process finished with exit code 0
```

Question – 2:

```
Q1.py × Q2.py ×
21     print("True\nBoth arrays are equal")
22     elif c == 0:
23     print("False\nBoth arrays are not equal")
elif c == 0

Q2 ×
↑ Enter the length of array: 6
↓ Start entering the values for first array
1
0
0
0
1
0
Start entering the values for second array
0
0
1
1
0
1
First Array: [1, 0, 0, 0, 1, 0]
Second Array: [0, 0, 1, 1, 0, 1]
False
Both arrays are not equal
```

Question – 3:



The image shows a Python IDE with two panels. The top panel, titled 'main.py', contains a script with seven lines of code. The bottom panel, titled 'main', shows the output of the script. The script imports numpy as np and prints the results of several operations involving np.nan, np.inf, and a floating-point comparison. The output shows the results of these operations: nan, True, False, nan, False, and a confirmation that the process finished with exit code 0.

```
1 import numpy as np
2
3 print(0 * np.nan)
4 print(np.nan != np.nan)
5 print(np.inf > np.nan)
6 print(np.nan - np.nan)
7 print(0.3 == 3 * 0.1)
```

Output:

```
"C:\Users\shanm\Desktop\Task 8\pyth
nan
True
False
nan
False
Process finished with exit code 0
```

Question – 4:

```
1  import pandas as pd
2
3  ser = pd.Series(dtype=object)
4  n = int(input("Enter the number of words: "))
5  print("Start entering the words: ")
6  for i in range(n):
7      w = pd.Series([input()])
8      ser = ser.append(w, ignore_index=True)
```

main x

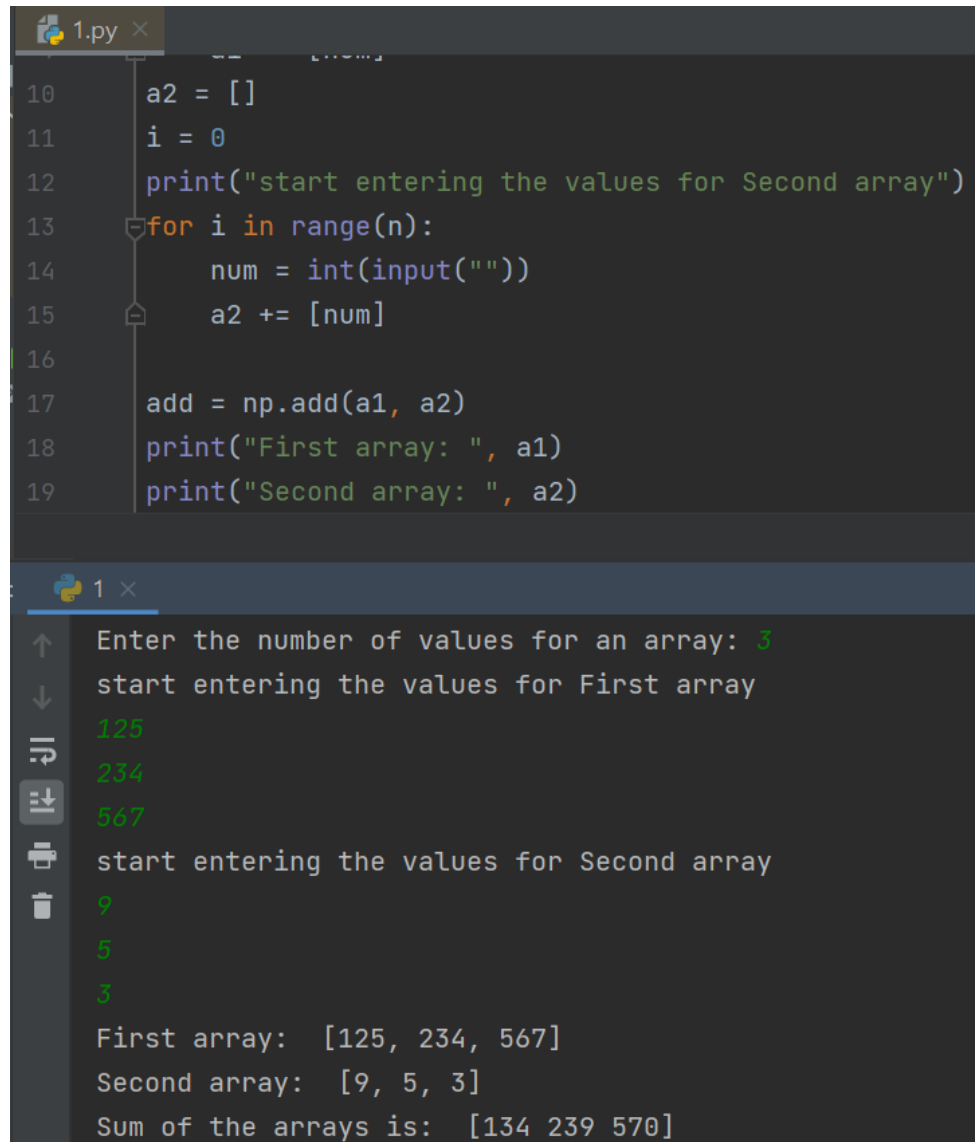
Enter the number of words: 6
Start entering the words:
amrita
school
of
engineering
chennai
campus

0	Amrita
1	School
2	Of
3	Engineering
4	Chennai
5	Campus

dtype: object

Question – 5:

1.



```
1.py x
10 a2 = []
11 i = 0
12 print("start entering the values for Second array")
13 for i in range(n):
14     num = int(input(""))
15     a2 += [num]
16
17 add = np.add(a1, a2)
18 print("First array: ", a1)
19 print("Second array: ", a2)
```



```
1 x
↑ Enter the number of values for an array: 3
↓ start entering the values for First array
125
234
567
↺ start entering the values for Second array
9
5
3
First array: [125, 234, 567]
Second array: [9, 5, 3]
Sum of the arrays is: [134 239 570]
```

2.

```
2.py x
2 x
Enter the size of First matrix(mxn)
m : 2
n : 3
Enter the size of Second matrix(mxn)
m : 3
n : 2
Start entering values for First Matrix:
Enter values for row - 1 :
1
3
4
Enter values for row - 2 :
2
5
6
Start entering values for Second Matrix:
Enter values for row - 1 :
2
6
Enter values for row - 2 :
2
4
Enter values for row - 3 :
1
3
Your First Matrix is:
[[1. 3. 4.]
 [2. 5. 6.]]
Your Second Matrix is:
[[2. 6.]
 [2. 4.]
 [1. 3.]]
Multiplication result of the matrices is:
[[12. 30.]
 [20. 50.]]
```