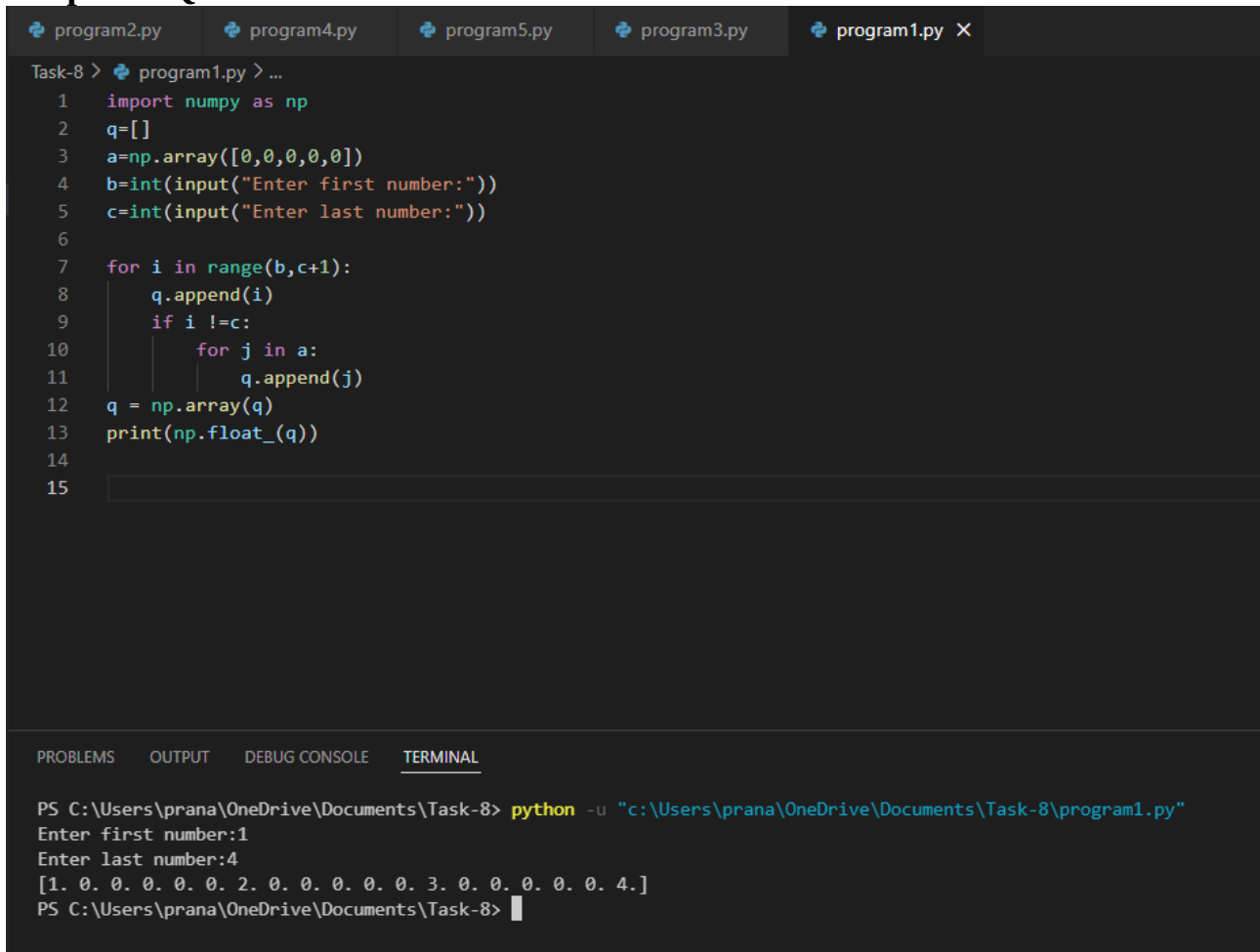


TASK 8 [PYTHON - MEDICORE LVL]

Output of Question 1:



The screenshot displays a code editor with five tabs: program2.py, program4.py, program5.py, program3.py, and program1.py (active). The code in program1.py is as follows:

```
Task-8 > program1.py > ...
1  import numpy as np
2  q=[]
3  a=np.array([0,0,0,0,0])
4  b=int(input("Enter first number:"))
5  c=int(input("Enter last number:"))
6
7  for i in range(b,c+1):
8      q.append(i)
9      if i !=c:
10         for j in a:
11             q.append(j)
12 q = np.array(q)
13 print(np.float_(q))
14
15
```

Below the code editor is a terminal window with the following output:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL

PS C:\Users\prana\OneDrive\Documents\Task-8> python -u "c:\Users\prana\OneDrive\Documents\Task-8\program1.py"
Enter first number:1
Enter last number:4
[1. 0. 0. 0. 0. 0. 2. 0. 0. 0. 0. 0. 3. 0. 0. 0. 0. 0. 4.]
PS C:\Users\prana\OneDrive\Documents\Task-8>
```

Output of Question 2:

program2.py X program4.py program5.py program3.py program1.py

Task-8 > program2.py > ...

```
1 import numpy as np
2 a=np.array([1,2,3,4,5])
3 b=np.array([4,2,3,4,5])
4 c=True
5 for i in range(0,a.__len__()):
6     if a[i]==b[i]:
7         c=True
8     else:
9         c=False
10        break
11 print(c) # will give true if equal, false if they are not equal
12
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
PS C:\Users\prana\OneDrive\Documents\Task-8> python -u "c:\Users\prana\OneDrive\Documents\Task-8\program2.py"
False
PS C:\Users\prana\OneDrive\Documents\Task-8> |
```

program2.py X program4.py program5.py program3.py program1.py

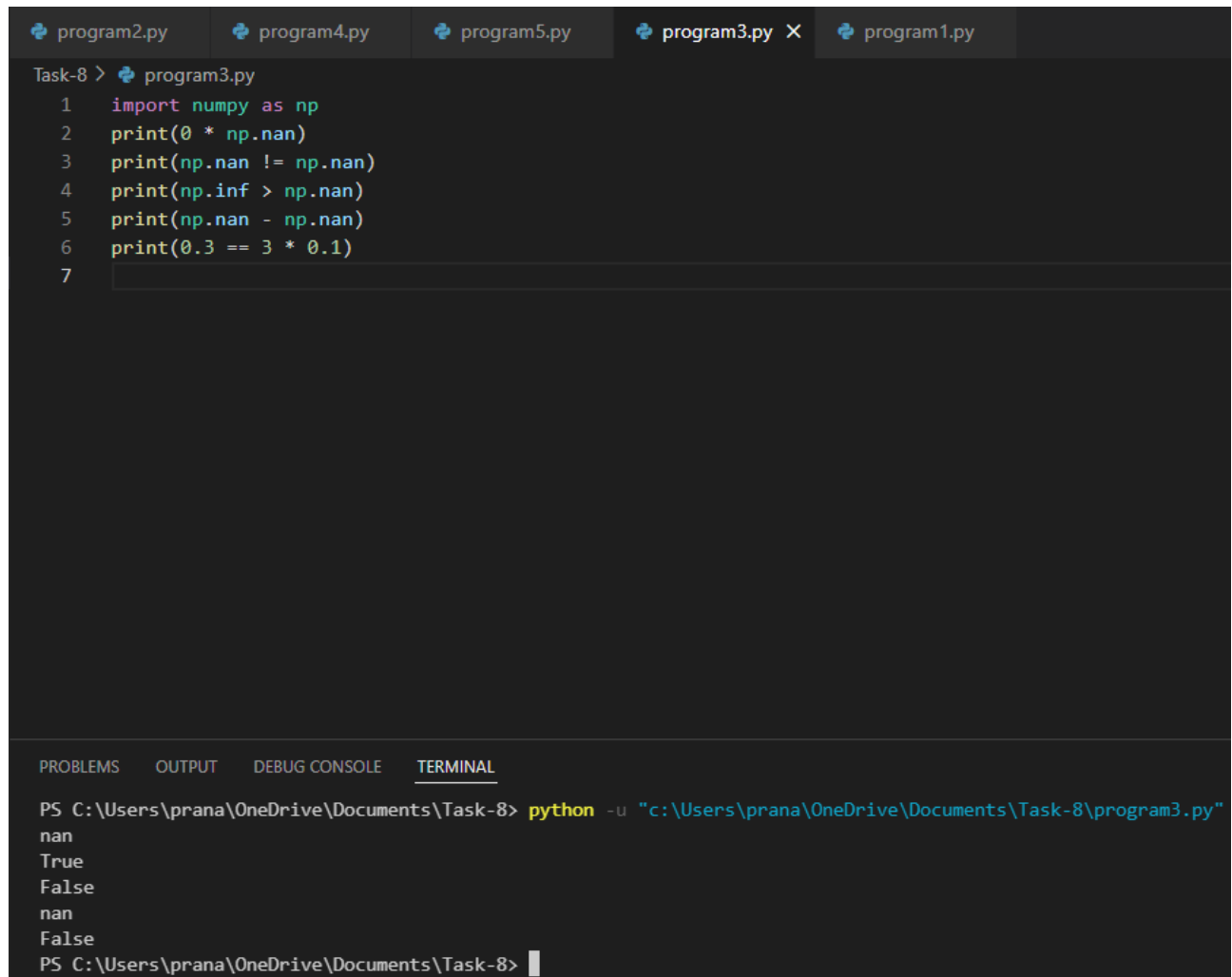
Task-8 > program2.py > ...

```
1 import numpy as np
2 a=np.array([1,2,3,4,5])
3 b=np.array([1,2,3,4,5])
4 c=True
5 for i in range(0,a.__len__()):
6     if a[i]==b[i]:
7         c=True
8     else:
9         c=False
10        break
11 print(c) # will give true if equal, false if they are not equal
12
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
PS C:\Users\prana\OneDrive\Documents\Task-8> python -u "c:\Users\prana\OneDrive\Documents\Task-8\program2.py"
True
PS C:\Users\prana\OneDrive\Documents\Task-8> |
```

Output of Question 3:



The screenshot shows a code editor with five tabs: program2.py, program4.py, program5.py, program3.py (active), and program1.py. The active tab contains the following Python code:

```
Task-8 > program3.py
1 import numpy as np
2 print(0 * np.nan)
3 print(np.nan != np.nan)
4 print(np.inf > np.nan)
5 print(np.nan - np.nan)
6 print(0.3 == 3 * 0.1)
7
```

Below the code editor is a terminal window with the following tabs: PROBLEMS, OUTPUT, DEBUG CONSOLE, and TERMINAL (active). The terminal shows the command to run the program and its output:

```
PS C:\Users\prana\OneDrive\Documents\Task-8> python -u "c:\Users\prana\OneDrive\Documents\Task-8\program3.py"
nan
True
False
nan
False
PS C:\Users\prana\OneDrive\Documents\Task-8>
```

nan means not a number and inf means floating point representation of positive infinity.

Output of Question 4:

```
program2.py  program4.py X  program5.py  program3.py  program1.py
Task-8 > program4.py > ...
1  import pandas as pd
2  ser = pd.Series(['amrita', 'school', 'of', 'engineering','chennai' , 'campus'])
3  for i in ser:
4      print(i.capitalize(),end=' ')
5
6
7
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
PS C:\Users\prana\OneDrive\Documents\Task-8> python -u "c:\Users\prana\OneDrive\Documents\Task-8\program4.py"
Amrita School Of Engineering Chennai Campus
PS C:\Users\prana\OneDrive\Documents\Task-8> 
```

Output of Question 5:

```
program2.py  program4.py  program5.py X  program3.py  program1.py
Task-8 > program5.py > ...
1  import numpy as np
2  a=np.array([1,2,3,4,5])
3  b=np.array([4,2,3,4,5])
4  print('the sum of both array is',a+b,'\n')
5  print('the product of both array is',a*b, '\n')
6  c=np.identity(2, dtype=int)
7  print('the identity matrix is: \n')
8  print(c)
9

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL
PS C:\Users\prana\OneDrive\Documents\Task-8> python -u "c:\Users\prana\OneDrive\Documents\Task-8\program5.py"
the sum of both array is [ 5  4  6  8 10]

the product of both array is [ 4  4  9 16 25]

the identity matrix is:

[[1 0]
 [0 1]]
PS C:\Users\prana\OneDrive\Documents\Task-8> 
```

Done by,

Pranav A N [ch.en.u4cys21056]