PYTHON PROGRAMMING LAB-16 ANSWERS

HAREESHA H M AF0364330 1. Convert the below list into numpy array then display the array

Input: my_list = [1, 2, 3, 4, 5]

Code:

import numpy as np #importing numpy.

list = [1, 2, 3, 4, 5] #inputing the list of elements.

numpy_array = np.asarray(list) #Converting the list into numpy_array.

print(numpy_array) #printing the result as numpy_array.

Output:

[1 2 3 4 5]

2. Convert the below list into a numpy array then display the array then display the first and last index and then multiply each element by 2 and display the result.

Input: my_list = [1, 2, 3, 4, 5]

Code:

```
import numpy as np #importing numpy as np.
list = [1, 2, 3, 4, 5] #inputing the list of elements.
numpy_array = np.array(list) # Converting the list to
numpy_array.
print("Numpy Array:", numpy_array) # Display the numpy_array.
first_index = 0 # Display the first index of the list.
last_index = len(numpy_array) - 1 # Display the last index of the
list.
print("First Index:", first_index) # printing the first index of the
list.
print("Last Index:", last_index) # printing the last index of the list.
result_array = numpy_array * 2 # Multiply each element by 2.
print("Result after multiplying each element by 2:", result_array)
# Display the result as result_array.
```

Output:

Numpy Array: [1 2 3 4 5]

First Index: 0 Last Index: 4

Result after multiplying each element by 2: [2 4 6 8 10]