**AL2001-Programming for AI**

**Quiz#3**

1. Explain slicing and indexing in NumPy arrays. How is it different from Python lists?
2. What is the difference between a Python list and a NumPy array?
3. How do you check the dimensions, shape, size, and data type of a NumPy array?
4. How can you create arrays of zeros, ones, or a specific constant in NumPy?
5. Given an array, write code to remove all even numbers from it.
6. Find the output of the following:

import numpy as np

arr = np.array([1, 2, 3, 4, 5, 6])

arr = arr.reshape(2, 3)

print(arr)

1. Find the output:

import numpy as np

arr = np.array([1, 2, 3, 4, 5])

print(arr[0]) # print first element

print(arr[-1]) # print last element

1. Find the error:

import numpy as np

arr = np.array([1, 2, 3])

del arr

print(arr)

1. Find the error:

import numpy as np

arr = np.zeros((1000000, 1000000))

1. Find the error:

import numpy as np

arr = np.array([1, 2, 3])

print(arr + None)