# Assignment Day 3

Answer 1:

```
import numpy as np
myArray = np.arange(2, 50, 3)
print(myArray)
print(np.arange(2, 50, 3))
```

Answer 2:

```
listOne = []
listTwo = []

for i in range(5):
    myInput = int(input())
    listOne.append(myInput)

print("List one :",listOne)

for i in range(5):
    myInput = int(input())
    listTwo.append(myInput)

print("List Two", listTwo)
my_array_one = np.array(listOne)
my_array_two = np.array(listTwo)
print("List 1 :", my_array_one)
print("List 2 :", my_array_two)
array_concat = np.concatenate((my_array_one, my_array_two))
print("concatenation of arrays :", array_concat)
print("Sorted array :", np.sort(array_concat))
```

Answer 3:

```
import numpy as np
arrayOne = np.array([[1, 4, 7], [3, 6, 9], [1, 4, 7], [3, 6, 9]])
print("Dimensions of a nd array is :", arrayOne.ndim)
print("Size of an array is :", arrayOne.size)
```

Answer 4:

```
import numpy as np
arr = np.arange(int(input()))
print("Test 1D array (shape) :", arr.shape)
two_D_Array = arr[np.newaxis]
print("2D array:", two_D_Array.shape)
```

Answer 5:

```
import numpy as np
arrayOne = np.square([1, 2, 3, 43, 2, 1])
arrayTwo = np.square([4, 5, 3, 43, 2, 1])
print(" horizontally stacked :", np.hstack((arrayOne, arrayTwo)))
print("vertically stacked : ", np.hstack((arrayOne, arrayTwo)))
```

Answer 6:

```
import numpy as np
myArray = np.myarray([4, 7, 8, 9, 5, 6, 5, 4, 4])
unique, counts = np.unique(myArray, return_counts=True)
myArray = np.asmyarray((unique, counts)).T
print(myArray)
```