```
#1)-accept two list of 5 elements and converts them into numpy arrays.
#concatenate these arrays and print it .also sort thse arrays and print it.
import numpy as np
print(' two list of numpy array elements is')
list1 = [2,4]
list2 = [2,3,4]
array_sort =[list1+list2]
print(array_sort)
```

```
 two list of numpy array elements is
[[2, 4, 2, 3, 4]]
```

```
#2)-how to get unique items and count of unique items
a_list = [1,1,3,6,7,7,8,9,9,0]
a_set = set(a_list)
count_of_unique_items = len(a_set)
list_unique_items = set(a_set)
print('count of unique items is')
print(count_of_unique_items)
print('list of unique items')
print(list_unique_items)
```

```
count of unique items is
7
list of unique items
{0, 1, 3, 6, 7, 8, 9}
```

```
#3)consider two square numpy array stack them vertically and horizontally
#hint: use vstack(),vhstack()
import numpy as np
a = np.array([[1,2],
              [3,4]])
b = np.array([[5,6],
              [7,8]])
print(" vertical stacking:\n",np.vstack((a,b)))
print(" \n horizontal stacking:\n",np.hstack((a,b)))
```

```
 vertical stacking:
 [[1 2]
 [3 4]
 [5 6]
 [7 8]]

 horizontal stacking:
 [[1 2 5 6]
 [3 4 7 8]]
```

```
#4)-how to convert a 1d array into a 2d array .demonstrate
# with the help of a code snippet
import numpy as np
```

```
arr = np.array([1,2,4,7,6,9,0,4])
print('1d arr is ')
print(arr)
print("\n now converting 1d array to 2d array is\n")
arr_2d = np.reshape(arr, (2,4))
print('2d array is ')
print( arr_2d)
```

```
1d arr is
[1 2 4 7 6 9 0 4]

 now converting 1d array to 2d array is

2d array is
[[1 2 4 7]
 [6 9 0 4]]
```

```
#5-write a code snippet to find the dimentions of
# an array and its size
import numpy as np
arr1 = np.array([1,2,8,5,7,6,5,6])
arr2 = np.array([[1,2],[3,4]])
shape_arr1 = np.size(arr1)
shape_arr2 = np.size(arr2)
print('size of array 1 is')
print(shape_arr1)
print('size of array 2')
print(shape_arr2)
ndim_arr1 = np.ndim(arr1)
ndim_arr2 = np.ndim(arr2)
print('the dimention of array 1 is')
print(ndim_arr1)
print('the dimention of array 2 is')
print(ndim_arr2)
```

```
size of array 1 is
8
size of array 2
4
the dimention of array 1 is
1
the dimention of array 2 is
2
```