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Batch : C2

Assignment 2

1. Create a list of 10 integers and sort it in ascending order.

```
[1]: l = [2 1 6 3 2 8 4 6 5 0]
     l sort()
     print(l)
```

[0, 1, 2, 2, 3, 4, 5, 6, 6, 8]

2. Create a list of 10 integers and sort it in descending order.

```
[2]: l = [2 1 6 3 2 8 4 6 5 0]
     l sort(reverse = True)
     print(l)
```

[8, 6, 6, 5, 4, 3, 2, 2, 1, 0]

3. Create a tuple of 6 numbers and sort it in ascending order.

```
[3]: t = (4 2 7 5 9 3)
     sorted_tuple = tuple(sorted(t))
     print(sorted_tuple)
```

(2 3, 4, 5, 7, 9)

```
[4]: l1 = [1 4 32]
     l2 = [6 4 9]
     merged_list = l1 + l2
     print(merged_list)
```

[1 4, 32, 6, 4, 9]

5. Merge two tuples of numbers and print resulting tuple.

```
[5]: t1 = (1 2 4)
     t2 = (6 5 8)
     merged_tuple = t1 + t2
     print(merged_tuple)
```

(1 2, 4, 6, 5, 8)

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6. Take a list of 8 numbers and print first 4 using slicing.

```
[6]: l = [1 2 4 5 6 8 9 0]
     l[:4 ]
```

[1, 2, 4, 5]

7. Take a list of 8 numbers and print the last 4 elements using slicing.

```
[13]: l = [1 2 4 5 6 8 9 0]
      l[ 4::]
```

[6, 8, 9, 0]

8. From a list of 10 elements, print every second element using slicing.

```
[14]: l = [2 1 6 3 2 8 4 6 5 0]
      l[::2]
```

[2, 6, 2, 4, 5]

9. From a tuple of 7 elements, print elements from index 2 to 5 using slicing.

```
[15]: t = (4 2 7 5 9 3 88)
      t[2 5 ]
```

(7, 5, 9)

10. From a tuple of 7 elements, print all elements in reverse order using slicing.

```
[16]: t = (4 2 7 5 9 3 88)
      t[::-1]
```

(88, 3 9, 5, 7, 2, 4)

```
[17]: l1 = [1 4 32]
      l2 = [6 4 9]
      merged_list = l1 + l2
      merged_list sort()
      print(merged_list)
```

[1 4, 4, 6, 9, 32]

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12. Combine two tuples, sort the combined tuple in ascending order, and print the result.

```
[19]: t1 = (1 2 4)
      t2 = (6 5 8)
      merged_tuple = t1 + t2
      sorted_tuple = tuple(sorted(merged_tuple))
      print(sorted_tuple)
```

```
(1  2, 4, 5, 6,  8)
```

13. Create a list of strings and sort them alphabetically.

```
[21]: l = [ bc"  eqw   ih   paq"]
      l sort()
      print(l)
```

['bc', 'eqw', 'ih', 'paq']

14. Merge a list of strings with another list of string and arrange them alphabetically

```
[22]: l1 = ["ac" "id" "pq"]
      l2 = ["vo" "cy" "bu"]
      print(l1+l2)
```

```
['ac',  'id',  'pq',  'vo',  'cy',  'bu']
```

15. Take a list of 10 numbers, split it into two halves, reverse each half separately, and print both halves.

```
[24]: l = [2 1 6 3 2 8 4 6 5 0]
      half1 = l[:5:]
      half2 = l[5::]
      half1 sort()
      half2 sort()
      print(half1)
      print(half2)
```

[1, 2, 2, 3, 6]
[0, 4, 5, 6, 8]