

1. What will be the output of the following code snippet?

```
a=[1,2,3,4,5,6,7,8,9]
print(a[::2])
```

- A. [1,2]
- B. [8,9]
- C. [1,3,5,7,9]
- D. [1,2,3]

2. What are the ways you can create a lists and tuples?

3. Can lists and tuples have heterogeneous and homogeneous data objects? Give me an example?

4. List out the differences between a list and a tuple?

5. How to determine the size of your lists?

6. Consider the below list:

```
lst = [10, 20, [30, [40, 50], 60], 70, [80]]
```

Take out the elements 60, 80 by using the corresponding index values and add the numbers, display the result?

7. What is the difference between `append()` and `extend()`? How do they work? Demonstrate with an example?

8. How to concatenate lists?

9. How to sort a list?

10. How to count occurrences of a list item?

11. How do you remove an element from a list?

12. Consider the below list:

```
lst = [10, 20, 30, 40, 50, 60, 70, 80]
```

Help me to insert 15 in between 10 and 20, 45 in between 40 and 50

13. How do you copy a list from another?

14. Demonstrate the difference between shallow and deep copy? How do they work?

15. Consider the below list:

```
lst = [10, 20, 30, 40, 50, 60, 70, 80]
```

How do you sort the list in descending order?

16. Consider the below list:

```
lst = [10, 20, 30, 40, 50, 60, 70, 80]
```

What will be output of the below:
`lst.index(100)`

17. How do you find minimum and maximum element/number of a list?

18. Create a list as below:

```
['Python', 'is', 'a', 'high', 'level', 'language']
```

For the above list, display the result as

```
'PYTHON-IS-A-HIGH-LEVEL-LANGUAGE'
```

19. Consider the below list:

```
lst = [10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200]
```

Create 4 lists. First list having 10 to 50, the second one having 60 to 100 and third list with 110 to 150 and fourth list with the remaining

20. List down all the methods used in list and tuple?