1. What are the different types of data structures in python?
2. What is a string? What is the data type to represent string value?
3. What is a List? What is the data type of list? Create one list?
4. What is a Tuple? What is the data type? Create one tuple?
5. What is a set? What is the data type? Create one set?
6. What is dictionary? What is the data type of it? Create one dictionary?
7. What is mutable and immutable? Explain each?
8. Is string mutable or immutable? Why?
9. What are the starting index numbers for both forward and backward indexing?
10. What is indexing and slicing? Differences between both?
11. What are the IndexError and TypeError errors?
12. St = ’python developer’
    1. Display as ‘Python developer’
    2. Display as ‘Python Developer’
    3. Count number of Es in that string.
    4. Find index position of first ’o’ in the above string.
    5. Find index position of second ‘o’ in the above string.
    6. Spilt the same string into two elements like ‘python’,’developer’
    7. Display string in reverse.
    8. From the above string, display only ‘on dev’.
    9. From above string remove ‘thon’
    10. Copy the same string into other new strings like str1,str2 and str3 at a time
13. Generate a list [10,12,14,16,18,20] by using range function?
14. lst=[10,20,'Python',10.5,1,10,True,False,0] what are the results of,
    1. How to display the count of elements in the above list?
    2. How to count no of occurrences of ‘10’ in the above list?
    3. What are the no of occurrences ‘1’ in the above list?
    4. How to add complex number 10+5j to the above list?
    5. How to add both complex number 1+2j and float value 1.3 to the above list.
    6. How to add bool value ‘True’ between 10 and 20 in the above list?
    7. How to remove the str value ‘Python’ from the above list?
    8. How to reverse the above list?
    9. How to copy the above list lst to another list lst1?
    10. Display index position of float value 10.5 in the above list?
    11. Replace float value 10.5 with 20.5
15. What are the differences between append() and extend() in list?
16. What is the ‘Del’ command? Explain with one example?
17. How to convert a list to string? Give one example?
18. How to convert a string to list? Give one example?
19. How to convert tuple to list? Give one example?
20. How to convert list to tuple? Give one example?
21. How to convert tuple to string? Give one example?
22. How to convert string to tuple? Give one example?
23. What is tuple? Does tuple allow duplicate elements?
24. Can we add new element to the existing set? How can we add?
25. Can we add new elements to the frozenset? If no, give one example?
26. Let’s take two sets

se1={1,2,3,4,5}

se2={1,2,3,6,7}

1. Perform union between se1 and se2, by using ‘I’ also
2. Perform intersection between se2 and se1, by using ‘&’ also
3. Perform difference between se2 and se1, by using ‘-’ also.
4. What intersection\_update?and perform between se1 and se2 and vice versa.
5. What is difference\_update?and perform between se1 and se2 and vice versa.
6. What is symmetric\_difference? Perform between se1 and se2 and vice versa.
7. What is symmetric\_difference\_update? perform between se1 and se2 and vice versa.
8. Difference between remove() and discard()?
9. Is frozenset mutable or immutable?
10. What is the result of isdisjoint() if one set contains elements and other set is empty?
11. What is the difference between ‘=’ and ‘==’? explain with one example?
12. How to check whether the specific element is existed or not in the given list? Example?
13. >>> se1={11,12,13,14,15}

>>> se2={11,12,13,16,17} what is the result of

* 1. se1==se2?
  2. se1!=se2
  3. se1<=se2
  4. se1<se2
  5. se2>se1
  6. se1.isdisjoint(se2)

1. In what cases isdisjoint method will be True? Give examples?
2. >>> s1={1,2,3}

>>> s2={1,2,3,4} what is the result of

* 1. s1<s2
  2. s1<=s2
  3. s1>s2
  4. s1>=s2
  5. s1.isdisjoint(s2)
  6. s1.issubset(s2)
  7. s1.issuperset(s2)
  8. s2.issubset(s1)
  9. s2.issuperset(s1)
  10. s1!=s2
  11. 4 not in s2?
  12. 1 in s2?

1. >>> s1{},

>>> s2{} what is the result of

* 1. s1<s2
  2. s1<=s2
  3. s1>s2
  4. s1>=s2
  5. s1.isdisjoint(s2)
  6. s1.issubset(s2)
  7. s1.issuperset(s2)
  8. s2.issubset(s1)
  9. s2.issuperset(s1)
  10. s1!=s2

1. >>> s1={True,False,10,20,3.5}

>>> s2={1,0} what is the result of

* 1. s2.issubset(s1)
  2. s1.issubset(s2)
  3. s1.isspuerset(s2)
  4. s2.issuperset(s1)
  5. s2>s1
  6. s1<s2
  7. s1>=s2
  8. s2<=s1
  9. s2=s1

1. Can we use duplicate keys in dictionaries?
2. >>> set1={10,20,30,40,50}

>>> set2={10,20,30,60,70}

* 1. Display all distinct elements from both sets
  2. Display only nonmatching elements from s1 set.
  3. Display only nonmatching elements from both sets
  4. Store the common elements from both sets into set1
  5. Remove matching elements from set1
  6. Store nonmatching elements from both sets into set2
  7. How to take backup of set1 to new set set3?

1. Create one empty dictionary and add any 5 key:value pairs?
2. Can we list and tuple as values in dictionary? If yes then create one dictionary with tuple and list as values?
3. stuDetails={'Id':100,'Name':'Sai', 'subjects':['SQL Server', 'Oracle', 'Python']}
   1. modify the value of name as ‘Durga’
   2. add new pair age:25
   3. display all keys from the stuDetails dictionary?
   4. Display all values from the stuDetails dictionary?
   5. Display all subjects which are stored in the stuDetails dictionary?
   6. Remove name key from the stuDetails?
   7. Create new dictionary from the tuple element? Eg:tup=(1,2,3,4,5)
      1. Store value ‘Sai’ for key 1
      2. Store value ‘Mahesh’ for key 2
      3. Store value True for key 3
      4. Store value 3+6j for key 4
      5. Store value 1000 for key 5
   8. remove all pairs from the above dictionary
4. St=”python narayana”

how to get the following from the above string

* 1. St[3::5]
  2. St[1::1]
  3. St[-1::-3]
  4. St[2::-1]
  5. St[1::15]