

**Topics covered: variables, operators, data structures, conditional statements. MCQ**

1. Which is the in correct way of naming a variable?
  - a. #var
  - b. Var\_1
  - c. Var1
  - d. \_var\_
  
2. `my_list = ['A string',23,100.232,'o',True]`  
what is the result of `my_list.pop(0)`?
  - a. True
  - b. A
  - c. O,True
  - d. A String
  
3. What will be the output of the following code?  
`my_list = [1, 2, 3, 4, 5]`  
`my_list[1:3] = [6, 7]`  
`print(my_list)`  
Write the answer:
  - a. [1, 2, 3, 4, 5]
  - b. [6, 7]
  - c. [1, 6, 7, 4, 5]
  - d. [1, 2, 6, 7, 5]
  
4. What is the purpose of the `index()` method in python lists?
  - a. It returns the length of the list
  - b. It returns the first index of the specified element.
  - c. It returns the last index of the specified element.
  - d. It reverses the order of the list
  
5. How do you remove an element from a list by it's value in python?
  - a. `delete()`
  - b. `remove()`

- c. pop()
- d. discard()

6. How do you add element to the end of a tuple in python?

- a. append()
- b. add()
- c. insert()
- d. None of the above

7. How do you access the value in dictionary using its key in python?

- a. By using access() method
- b. By using value() method
- c. By using indexing with [key]
- d. By using the retrieve() function

8. What will happen if you try to access a key in a dictionary that doesn't exist?

- a. It will return 'None'.
- b. It will raise a 'KeyError' exception
- c. It will return a empty dictionary.
- d. It will create a new key with a 'None' value

9. How do you access the first element of a list in python?

- a. first()
- b. get(0)
- c. [0]
- d. Start

10. my\_list = ['Argue', 'Burglar', 'Parent', 'Linear', 'shape']

What will be the output of sorted(mylist reverse = True)

### Few more questions

1. Write a Python program which accepts the radius of a circle from the user and compute the area.
2. Solve the expression.  $5.2 + \text{True} + \text{bool}(-5) - 4 + 42//5 + \text{bool}(0) + \text{False} + \text{int}(5.9) + \text{float}('1')$
3. Write a Python program to get the difference between a given number and 17,
  - a. if the number which user is giving, is greater than 17, then perform (number + 17).
  - b. else just print the number.
4. To check whether given element exists in list or not??

List = [1,2,3,4,5,6,7,8,9,10]

check if 9 and 12 are present in given list or not

5. For the above list, Return the largest item.
6. L = [1, 2, 3, 4]
  - a. For the existing list add element 10.
  - b. Add a new element 'St.Claret' at position 2
  - c. Add the list [10,11,12] to the existing list L.

7. L2 = [[1, 2, 3], ['b', 'a', 'd'], [7, 8, 9]]

How to retrieve element 'd'?

8. T = (1,2,3)

T[-3:0]

What will be the output? Justify?

9. Dict= {'Name': 'Thor', 'Place': 'Asgard', 'Weapon': 'Hammer', 1: 2, 3: 'power', 'alibies': ['Ironman', 'Captain America'], 'abc': {1: 2, 4: 5}}

Retrieve 'Captain America' from the given dictionary.

10. Create a dictionary having key as 1,2,3 and values as 'Python', 'Data Science', 'St.Claret'
  - a. Perform key(),items(),items() methods on the dictionary created.
11. first\_num , second\_num are the two variables which is taking integer values (for eg first\_num = 20 , second\_num = 30)
  - a. if first\_num is > 0 then perform, addition of first\_num + second\_num else print first\_num is greater than second\_num
  - b. if first\_num < 0 print first\_num is a negative number.
- 12 Write a program to
  - a. create 2 string(user defined),
  - b. concatenate the same and print the concatenated string
  - c. accessing sub-string from the concatenated string.
13. Return the count of sub-string "Shubhangi" appears in the given string  

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String = "Shubhangi is a developer. Shubhangi is a Data Scientist"
```
- 13(b) Write a python logic to check whether the above given string is starting with 'Shubhangi' and ending with 'Scientist' or not.
14. Write a program to whether a number (accepted from user) is divisible by 2 and 3 both.
15. Write a program to accept a number from 1 to 7 and display the name of the day like 1 for Sunday , 2 for Monday and so on.

