

PYTHON – WORKSHEET 5

Q1 to Q10 have only one correct answer. Choose the correct option to answer your question.

1. Which of the following operators can be used to concatenate two lists?
A) * B) & C) + D) none of the above
C) +
2. Consider the below two statements and select the correct option accordingly i. List is an immutable data type like strings. ii. Lists are two dimensional data-structures.
A) i-True, ii-False B) i-True, ii-True C) i-False, ii-False D) i-False, ii-True
D) i-False, ii-True
3. What will be the output of the following list comprehension? `L=[x.upper() for x in ["abc","rahul","nitin"]]`
A) `["aBc","Rahul","nitIN"]`
B) `["ABC","RAHUL","NITIN"]`
C) `["ABc","RAHul","NItin"]`
D) None of the above
B) ["ABC","RAHUL","NITIN"]
4. What will be the output of the following list comprehension? `L = [x for x in [1,2,3,4,5,6] if x%2==0]`
A) `[2,3,4]` B) `[1,3,4]` C) `[4,5,6]` D) `[2,4,6]`
D) [2,4,6]
5. What will be the output of the following line of code? `A = [2,3,4,5,6,8,9] B = A[1:4] C = [x for x in B if x%2==0]`
A) `[3,4,5,6]` B) `[45]` C) `[6]` D) `[4,5,6]`
C) [6]
6. What will be the output of following lines of code? `a = {1,4,6,8} b = {2,4,6,8} c = {1,3,5,7} print(a.intersection(a.difference(b)))`
A) `{2,3}` B) `{3,5}` C) `{1,7}` D) None of the above
D) None of the above
7. What will be the output of the following lines of code? `A = {1,22,22,3} print(a)`
A) `{1,22,22,3}` B) error C) `{1,3,22}` D) None of the above
D) None of the above
8. By which of the following ways you can access the set `{1,2,3}` in the following line of code?
`a=["asd",["d",{1,2,3},3],23]`
A) `a[0][2]` B) `a[1][0]` C) `a[1][1]` D) None of the above
C) a[1][1]
9. Which of the following is not a method of sets in python?
A) `difference()` B) `intersection()` C) `symmetric_difference()` D) None of the above
C) symmetric_difference()

10. Which of the following is true with respect to sets in python? (More Than One options may be correct. Mark all the correct options)
- A) sets are one-dimensional data structures
 - B) no two elements of a set can be same
 - C) sets are immutable
 - D) All of the above.
- A) sets are one-dimensional data structures*
B) no two elements of a set can be same

Q11 is subjective answer type question, answer it briefly.

11. List any two major differences between lists and sets in python.
- Sets are mutable collection of distinct immutable values that are unordered. To initialize a set with values, we can pass in a list to set().
- Lists are slightly faster than sets when we just want to iterate over the values.
- However , sets are significantly faster than lists if we want to check if an item combined within it. They can only contain unique item though.