Python Interview Questions

Estimated Time of Completion : 45 minutes

Q1. Which of the following statements create a dictionary? One or more options may be correct.

1. dict = {"david":14, 24:"alex", 35:"john"}
2. dict = { "peter", 24, "alex", 35 }
3. dict = {"david":14, "peter":24, "alex":35}
4. dict = ("a":1 , "b":2, "c":3, "d":4)

Q2. What is the exact command to divide 16 by 3 and get result as 5?

1. 16/3
2. 16//3
3. 16%3
4. 16**3

Q3. What is the output of the following code ?

```
A0 = dict(zip(('a', 'b' ,'c' ,'d' ,'e'),(1,2,3,4,5)))
print (A0)
```

1. ('a', 1, 'b', 2, 'c', 3, 'd', 4, 'e', 5)
2. ('a', 1), ('b', 2), ('c', 3), ('d', 4), ('e', 5)
3. {'a': 1, 'b': 2, 'c': 3, 'd': 4, 'e': 5}
4. {('a', 1),('b', 2), ('c', 3), ('d', 4), ('e', 5)}

Q4. Write a python program to print the numbers of the given list after removing even numbers from the list.

```
nums = [5, 7, 8, 9, 12, 15, 17, 18, 21, 22, 24]
```

Q5. Write a program to print the reverse of a list.

Q6. What is the correct output of the following code?

```
D = dict()
for x in enumerate(range(5),1):
        D[x[0]] = x[1]
        D[x[1]+7] = x[0]
print(D)
```


1. {7: 0, 8: 1, 9: 2}
2. {1: 0, 7: 1, 2: 1, 8: 2, 3: 2, 9: 3}
3. {7: 1, 8: 2, 9: 3}
4. {0: 0, 7: 0, 1: 1, 8: 1, 2: 2, 9: 2}

Q7. What is the correct output of the following code?

```
num = 7
if num > 3:
        print("3")
        if num < 5:
                print("5")
                if num ==7:
                        print("7")
```


1. 3
2. 3 7
3. 3 5 7
4. 7

Q8. What is Recursion? Write a program to print fibonacci series 0,1,1,2,3,5,8.... illustrating the use of recursion.

Q9. Explain the difference between list, tuple and sets?

Q10. Using string slicing print the following substrings from the given string?

str = 'character'

    1. *act .*   2. *tcarahc*

Q11. Write a function that prints unique items from the list. For example, [4,5,4,3,6,6,12,2,5,3] should return [4,5,3,6,12,2].

Q12. Replace the pass keyword with the right expression to get the required output?.

OUTPUT: {0: 1, 1: 1, 2: 1}

```
D = dict()
for i in range (3):
    for j in range(2):
        pass
print(D)
```

Q13. Define Singleton Design Pattern?

Q14. Using Method Resolution Operator, select the correct algorithm search path that will be used by python in the given below code.

```
class A:
      def who_am_i(self):
      print("I am a A")

class B(A):
      def who_am_i(self):
      print("I am a B")

class C(A):
      def who_am_i(self):
      print("I am a C")

class D(B,C):
      def who_am_i(self):
      print("I am a D")

d1 = D()
d1.who_am_i()
```

1. **D, B, C, A**
2. **D, B, A, C**
3. **D, C, A**
4. **D, B**