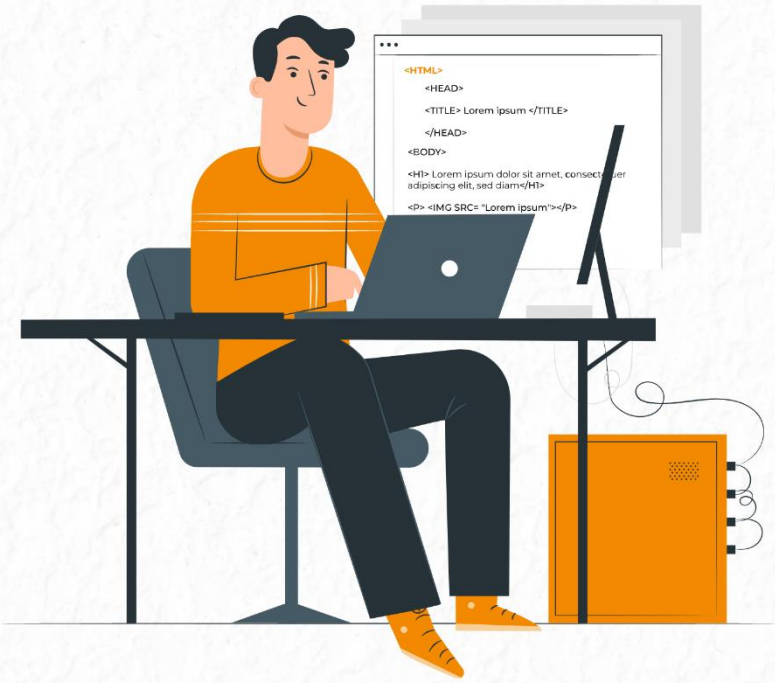
iNeuron



Python

Interview Questions

Q1. Define Dictionary.

Ans- a) Unordered sets of objects.
b) Also known as maps, hashmaps, lookup tables, or associative array.
c) Data exists in key-value pair. Elements in dictionary have a key and a corresponding value. The key and the value are separated from each other with a colon ":" and all elements are separated by comma.
d) Elements of a dictionary are accessed by the "key" and not by index. Hence it is more or less like an associative array where every key is associated with a value and elements exists in an unordered fashion as key-value pair.
e) Dictionary literals use curly brackets ' {}'.

Q2. How can we create a dictionary object?

Ans- A dictionary object can be created in any of the following ways:

```
# Initializing an empty Dictionary
Dictionary = {}
print("An empty Dictionary: ")
print(Dictionary)

# Creating a Dictionary using in-built dict() method
Dictionary = dict({1: 'Python', 2: 'Java', 3:'Dictionary'})
print("\nDictionary created by using dict() method: ")
print(Dictionary)

# Creating dictionary by key: value pair format
Dictionary = dict([(1, 'Java'), (2, 'Python'), (3, 'Dictionary')])
print("\nDictionary with key: value pair format: ")
print(Dictionary)
```

Q3. Explain from Keys () method.

Ans- The form keys () method returns a new dictionary that will have the same keys as the dictionary object passed as the argument. If you provide a value then all keys will be set to that value or else all keys will be set to 'None'.

```
In [7]: #forming a dictionary

        subject={'english':89,'maths':90}
        print(country)
        print(len(country))
        print(type(country))

        {'english': 89, 'maths': 90}
        2
        <class 'dict'>

In [8]: #providing no value

        dict2=dict.fromkeys(subject)
        dict2

Out[8]: {'english': None, 'maths': None}

In [10]: #providing a value

         dict3=dict.fromkeys(subject,92)
         dict3

Out[10]: {'english': 92, 'maths': 92}
```

Q4. What is the purpose of items() function?

Ans- the items() function does not take any parameters. It returns the view object that shows the given dictionary's key value pairs.

```
In [11]: #usage of items function

         subject={'english':89,'maths':90}
         subject.items()

Out[11]: dict_items([('english', 89), ('maths', 90)])
```

Q5. Define bucket sorting?

Ans- Bucket Sort is a two-step procedure for sorting data. First, the values are collected in special containers called buckets. Then, these values are transferred appropriately into a sorted list. For the algorithm to be feasible, the elements to be sorted must have a limited set of values.

Q6. Which one of the following is correct way of declaring and initialising a variable, x with value 5?

A. int x
    x=5
B. int x=5
C. x=5
D. declare x=5

Ans: C
Explanation: One of the following is correct way of declaring and initialising a variable, x with value 5 is x=5.

Q7. How many local and global variables are there in the following Python code?

```
var1=5
def fn():
 var1=2
 var2=var1+5
var1=10
fn()
```

A. 1 local, 1 global variables
B. 1 local, 2 global variables
C. 2 local, 1 global variables
D. 2 local, 2 global variables

Ans-D. 2 local, 2 global variables
Explanation: 2 local, 2 global variables are there in the following Python code.

Q8. Which one is false regarding local variables?
A. These can be accessed only inside owning function
B. Any changes made to local variables does not reflect outside the function.
C. These remain in memory till the program ends
D. None of the above
Ans: C
Explanation: These remain in memory till the program ends is false regarding local variables.

Q9. Which of the following options will give an error if set1={2,3,4,5}?
A. print(set1[0])
B. set1[0]=9
C. set1=set1+{7}
D. All of the above
Ans : D

Explanation: All of the above option will give error if set1={2,3,4,5}.

Q10. What will be the result of below Python code?
set1= {1,2,3}

set1.add (4)

set1.add (4)

print(set1)

A. {1,2,3,4}
B. {1,2,3}
C. {1,2,3,4,4}
D. It will throw an error as same element is added twice

Ans: A
Explanation: The output for the following python code is {1,2,3,4}.

Q11. Which of the following options will give an error if set1= {2,3,4,5}?
A. print(set1[0])
B. set1[0] = 9
C. set1=set1 + {7}
D. All of the above

Ans: D
Explanation: All of the above option will give error if set1= {2,3,4,5}

Q12.What will the below Python code do?
set1={"a",3,"b",3}
set1.remove(3)
A. It removes element with index position 3 from set1
B. It removes element 3 from set1
C. It removes only the first occurrence of 3 from set1
D. No such function exists for set
Ans: B
Explanation: It removes element 3 from set1.

Q13. What will be the output of following Python code?
set1= {2,5,3}
set2= {3,1}
set3= {}
set3=set1&set2
print(set3)

A. {3}
B. {}
C. {2,5,3,1}
D. {2,5,1}

Ans: A
Explanation: The output of the following code is {3}

Q14. Which of the following is True regarding lists in Python?
A. Lists are immutable.
B. Size of the lists must be specified before its initialization
C. Elements of lists are stored in contagious memory location.
D. size(list1) command is used to find the size of lists.
Ans: C
Explanation: Elements of lists are stored in contagious memory location is True regarding lists in Python.

Q15. Which of the following will give output as [23,2,9,75]?
If list1= [6,23,3,2,0,9,8,75]
A. print(list1[1:7:2])
B. print(list1[0:7:2])
C. print(list1[1:8:2])
D. print(list1[0:8:2])
View Answer

Ans: C
Explanation: print(list1[1:8:2]) of the following will give output as [23,2,9,75].

Q16. The marks of a student on 6 subjects are stored in a list, list1= [80,66,94,87,99,95]. How can the student's average mark be calculated?

A. print(avg(list1))
B. print(sum(list1)/len(list1))
C. print(sum(list1)/size of(list1))
D. print(total(list1)/len(list1))

Ans: B
Explanation: the student's average mark be calculated through print(sum(list1)/len(list1)).

Q17. What will be the output of following Python code?

list1= ["Python", "Java", "c", "C", "C++"]

print(min(list1))

A. c

B. C++

C. C

D. min function cannot be used on string elements

Ans: C

Explanation: C will be the output of following Python code.

Q18. What will be the result after the execution of above Python code?

list1= [3,2,5,7,3,6]
list1.pop (3)
print(list1)

A. [3,2,5,3,6]
B. [2,5,7,3,6]
C. [2,5,7,6]
D. [3,2,5,7,3,6]
Ans: A
Explanation: [3,2,5,3,6] will be the result after the execution of above Python code.

Q19. What will be the output of below Python code?

```
list1=["tom","mary","simon"]
list1.insert(5,8)
print(list1)
```

A. ["tom", "mary", "simon", 5]
B. ["tom", "mary", "simon", 8]
C. [8, "tom", "mary", "simon"]
D. Error
Ans: B
Explanation: ["tom", "mary", "simon", 8] will be the result after the execution of above Python code.

Q20. Which among the following are mutable objects in Python?
(i) List
(ii) Integer
(iii) String
(iv) Tuple

A. i only
B. i and ii only
C. iii and iv only
D. iv only

Ans- A

Explanation: List are mutable objects in Python.