



Python

Interview Questions

1. Define string, list and Tuple.

Ans- String- They are immutable sequence of text characters. There is no special class for a single character in Python. A character can be considered as String of text having a length of 1.

List- Lists are very widely used in Python programming and a list represents sequence of arbitrary objects. List is mutable.

Tuple-Tuple is more or less like a list but it is immutable.

2. What would be the output for the following expression:

Ans- `print('{0:4}'.format(7.0 / 3))`

3. How can String literals be defined?

Ans- `a= "Hello World"`

`b= 'Hi'`

`type(a)`

`<class 'str'>`

`Type(b)`

`<class 'str'>`

`c=" Once upon a time in a land far away there lived a king"`

`type(c)`

`<class 'str'>`

4. How can we perform concatenation of Strings?

Ans -Concatenation of Strings can be performed using following techniques:

1) +operator

`string1= "Welcome"`

`string2 = "to the world of Python!!!"`

`string3 = string1 + string2`

`print(string3)`

Welcome to the world of Python!!!

2)Join () function

The join () function is used to return a string that has string elements joined by a separator. The syntax for using join () function.

```
string_name. join (sequence)
string1 = "-"
sequence = ("1", "2", "3", "4",)
print (string1.join(sequence))
1-2-3-4
```

3) % operator

```
string1 = "Hi"
string2 = "There"
string3 = "%s %s" % (string1, string2)
print(string3)
Hi There
```

4) format () function

```
string1= "Hi"
string2= "There"
string3 = "{} {}". format (string1, string2)
print(string3)
Hi There
```

5) f-string

```
string1= "Hi"
string2= "There"
string3= f' {string1} {string2}'
print(string3)
Hi There
```

5. How can you repeat strings in Python?

Ans- Strings can be repeated either using the multiplication sign '*' or by using for loop.

➤ **Operator for repeating strings**

```
string1 = "Happy Birthday!!!"
```

```
string1*3
```

```
Happy Birthday!!! Happy Birthday!!! Happy Birthday!!!
```

➤ **for loop for string repetition**

```
for x in range (0,3)
```

```
for x in range (0,3):
```

```
print ("Happy Birthday!!!)
```

6. What would be the output for the following lines of code?

Ans- string1 = "Happy"

string2 = "Birthday!!!"

(string1 + string2) *3

Happy Birthday!!! Happy Birthday!!! Happy Birthday!!!

7. What is the simplest way of unpacking single characters from string "HAPPY"?

Ans- This can be done as shown in the following code:

```
string1 = "Happy"
```

```
a,b,c,d,e = string1
```

```
print(a)
```

```
H
```

```
print(b)
```

```
a
```

```
print(c)
```

```
p
```

```
print(d)
```

```
p  
print(e)  
y
```

8. How can you access the fourth character of the string "HAPPY"?

Ans- You can access any character of a string by using Python's array like indexing syntax. The first item has an index of 0. Therefore, the index of fourth item will be 3.

```
string1 = "Happy"  
string1[3]
```

Output

```
p
```

9. If you want to start counting the characters of the string from the right most end, what index value will you use?

Ans- If the length of the string is not known we can still access the rightmost character of the string using index of -1.

```
string1 = "hello world"  
string1[-1]
```

output

```
!
```

10. By mistake the programmer has created string1 having the value "happu". He wants to change the value of the last character. How can that be done?

```
Ans- string1=" happu"  
string1.replace('u','y')  
happy
```

Q11.Which character of the string will exist at index -2?

Ans- Index of -2 will provide second last character of the string.

```
string1=" happy"
```

```
string [-1]
```

```
Y
```

```
string1[-2]
```

```
p
```

Q12.Explain slicing in strings.

Ans- Python allows you to extract a chunk of characters from a string if you know the position and size. All we need to do is to specify the start and end point.

The following example shows how this can be done.

Eg-1

```
string1="happy-birthday"
```

```
string1[4:7]
```

output

```
y-b
```

Eg-2

```
string1="happy-birthday"
```

```
string1[:7]
```

output

```
happy-b
```

Eg-3

```
string1="happy-birthday"
```

```
string1[4:]
```

output

```
y-birthday
```

13. What would be the output for the following code?

Ans- string1="happy-birthday"

String1[-1: -9: -2]

Output

!!ah

14. What is the return type of function id?

- a) int
- b) float
- c) bool
- d) dict

Answer: a

Explanation: Execute help(id) to find out details in python shell.id returns a integer value that is unique.

15. What data type is the object below?

L = [1, 23, 'hello', 1]

- a) list
- b) dictionary
- c) array
- d) tuple

Answer: a

Explanation: List data type can store any values within it.

16.The method to extract the last element of a list is

- a) List_name[2:3]
- b) List_name[-1]
- c) List_name[0]

d) None of the above

Answer: a) List_name [-1]

17. To remove an element of a list, we use the attribute

a) add

b) index

c) pop

d) Delete

Answer – c) pop

18. To add an element to a list, we use the attribute

a) append

b) copy

c) reverse

d) sort

Answer- a) append

19. The process of pickling in Python includes _____

a) conversion of a Python object hierarchy into byte stream

b) conversion of a data table into a list

c) conversion of a byte stream into Python object hierarchy

d) conversion of a list into a data table

Answer: a

Explanation: Pickling is the process of serializing a Python object, that is, conversion of a Python object hierarchy into a byte stream. The reverse of this process is known as unpickling.

20. What is the return type of function id?

- a) int
- b) float
- c) bool
- d) dict

Answer: a

Explanation: Execute `help(id)` to find out details in python shell. `id` returns a integer value that is unique.