1 What is Python?

As you've probably expected, this is one of the very first Python interview questions that you're bound to get asked. Your employers are probably going to expect a concise and thorough answer, so let's provide them one.

Python is a portable, high-level programming language that has inbuilt automatic memory management, threads, strings, is object-based. It is loved for the simplicity and built-in data structure - the fact that Python is open source also contributes to its fame.

2 Why is Python Better Than Java?

Some of your Python interview questions might involve comparisons with other programming languages - these can be random, but Java seems like the most common one that employers ask.

In short, **Python (when compared with Java) is easier to use and has much better coding speeds.** Also, when it comes to data, Java is statically typed, while Python offers dynamic typing. This is considered to be a huge advancement.

3 How Many Data Types are There in Python?

One of the more common interview questions on Python - you might get asked to either say the number or actually name them. Python has five different data types:

1. String	2. List	3. Number

4. Dictionary	5. Tuple

4

4   What is "Pickling" and "Unpickling"

Pickling happens when a module within Python is accepted and converted into a string module, and then later dumped into the file.

As opposed to that, **unpickling is when you retrieve the string module from the file.**
For such comparison-based Python interview questions, try to keep your explanations as simple as possible. Your potential employers will probably appreciate that you are able to explain tough topics in a simple-to-understand manner.
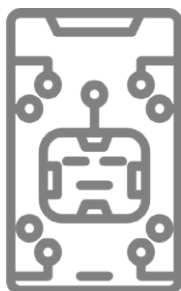
5   What is 'Lambda'?

This one's pretty straight forward. To put it simply - lambda is an anonymously performed function with just one, single expression.

6 How is Memory Managed Within Python?

Python's private heap space is responsible for memory management. It is only accessible by an interpreter - if you're a Python programmer, you won't be able to reach it. The language also has an inbuilt recycler that is responsible for creating more free heap space (this is done by recycling unused memory).

7   What is 'Pass'?

Pass simply indicates a space that should be left blank within the compound statement.

8 Can you Copy an Object in Python?

Even though it sounds like one of the basic Python interview questions, you would probably be surprised how many people actually manage to stumble with it.

Yes, you can copy objects in Python, but not all of them. The most general and well-known way to do it is to use the copy.copy() command.

9 How to Delete a File in Python?

To delete something in Python, use the command: **os.remove(name_of_the_file)**

10 What is a 'Dictionary'

A dictionary is an in-built data type. Dictionaries are comprised of keys and the key corresponding values. Here's an example:

```
dict={'Car':'Ford','Type':'Mustang','Year':'1967'}
print dict[Car]
Ford
print dict[Type]
Mustang
print dict[Year]
1967
```

11 How is 'Tuple' and a 'List' Different?

The main difference is that **lists are slower**, but they can be edited, while **tuples work faster**, but cannot be modified.

www.bitdegree.org

12 What is a 'Dictionary'?

A dictionary is an in-built data type. Dictionaries are comprised of keys and the key corresponding values. Here's an example:

13 Is Python an Interpreted Language?

Again, one of the most commonly asked Python coding interview questions - you should definitely keep this in mind.

Yes, Python is an interpreted programming language. What does this mean? It's a three-way process - you write the source code, Python converts it into an intermediate language (for easier understanding) and then it's yet again changed into machine codes that are then executed.

14 Bonus: Practice

Which of these is wrong?

a) xyz = 5,000,000
b) x,y,z = 1000, 3000, 7000
c) x y z = 1000 3000 7000
d) x_y_z = 5,000,000

C is the only one that's wrong.

15 How is Python Object – Oriented ?

Object-oriented programming languages (OOPs) are based on classes and objects of those classes. Python is exactly that. More so, **Python possesses the features that are credited to OOPs - inheritance, polymorphism, etc.**

16 What is 'Slicing'?

In Python, slicing is **when you select multiple items from places** like lists, strings and so on.

So - those are the more basic Python interview questions that you might receive during your job interview. Now, let's try and move more towards the advanced stuff and some untouched Python technical interview questions.

17 Leaked Exercises

Write a piece of code that would calculate a list of given numbers.

```
def list_sum(num_List):
if len(num_List) == 1:
return num_List[0]
else:
return num_List[0] + list_sum(num_List[1:])
print(list_sum([3, 5, 8, 9, 9]))
```

Write a piece of code that would randomize items from the list.

```
from random import shuffle
x = ['Skyrim', 'Belongs', 'To', 'The', 'Nords']
shuffle(x)
print(x)
```

18 Is There a Difference Between 'Range' and 'Xrange'?

Yes, albeit it might not be noticeable at first. In terms of functionality and the tasks they perform, both commands are nearly identical.

The key difference, however, is that **range (when used) brings back a list object, while xrange returns an xrange object.**

19 What is the Dogpile Effect?

This is one of the Python interview questions that might be tricky to memorize at first, so do give it a few good tries.

A **Dogpile effect happens when a website's cache expires**, yet it is hit by many different requests from the user. This can cause many different problems, from lag spikes to complete crashes.

A system called semaphore lock is used to prevent Dogpiles from happening.

20 Explain what is Called 'Encapsulation'

Encapsulation is one of the features that Python has because it's an object-oriented programming language.

Encapsulation is a process of **grouping related data members into one, single place**. Along with the member themselves, encapsulation also returns their functions, too.

, mostly because not many peoplepay attention to it.

Python indeed does have its own compiler, but it's rather easy to miss. This is because it works automatically - you don't really notice it.