Interview Questions

**Q.1. What are the key features of Python?**

If it makes for an introductory language to programming, Python must mean something. These are its qualities:

* Interpreted
* Object-oriented
* Concise and simple
* Free
* Has a large community

**Q.2. Differentiate between lists and tuples.**

The major difference is that a list is mutable, but a tuple is immutable.

**Q.3. How would you convert a string into lowercase?**

We use the lower() method for this.

**Q.4. What is the pass statement in Python?**

There may be times in our code when we haven’t decided what to do yet, but we must type something for it to be syntactically correct. In such a case, we use the pass statement.

**Q.5. How do you get a list of all the keys in a dictionary?**

Be specific in these type of Python Interview Questions and Answers.

For this, we use the function keys().

**Q.6. How will you remove a duplicate element from a list?**

We can turn it into a set to do that.

**Q.7. What are membership operators?**

With the operators ‘in’ and ‘not in’, we can confirm if a value is a member in another.

>>> 'me' **in** 'disappointment' True

**Q.8. What is a function?**

When we want to execute a sequence of statements, we can give it a name. Let’s define a function to take two numbers and return the greater number.

**Q.9. What is recursion?**

When a function makes a call to itself, it is termed [***recursion***](https://data-flair.training/blogs/recursion-in-python/). But then, in order for it to avoid forming an infinite loop, we must have a base condition.

**Q.10. Explain Python List Comprehension.**

The [***list comprehension in python***](https://data-flair.training/blogs/python-list-comprehension/) is a way to declare a list in one line of code. Let’s take a look at one such example.

**Q.11.  How many arguments can the range() function take?**

The range() function in Python can take up to 3 arguments. Let’s see this one by one.

Here, the first argument is the start value, the second is the stop value, and the third is the step value.

**Q.12. Why do we need break and continue in Python?**

Both break and continue are statements that control flow in [***Python loops***](https://data-flair.training/blogs/python-loops/). break stops the current loop from executing further and transfers the control to the next block. continue jumps to the next iteration of the loop without exhausting it.

**Q.13. Is Python case-sensitive?**

A language is case-sensitive if it distinguishes between identifiers like myname and Myname. In other words, it cares about case- lowercase or uppercase.

**Q.14. Explain the //, %, and \*\* operators in Python.**

The // operator performs floor division. It will return the integer part of the result on division. Similarly, \*\* performs exponentiation. a\*\*b returns the value of a raised to the power b. Finally, % is for modulus. This gives us the value left after the highest achievable division.

**Q.15. Explain logical operators in Python.**

We have three logical operators- and, or, not.

**Q.16. Explain identity operators in Python.**

The operators ‘is’ and ‘is not’ tell us if two values have the same identity.

**Q.17. What data types does Python support?**

**Numbers –** Numbers use to hold numerical values.

**Strings –** A string is a sequence of characters. We declare it using single or double quotes.

**Lists –** A list is an ordered collection of values, and we declare it using square brackets.

**Tuples –** A tuple, like a list, is an ordered collection of values. The difference. However, is that a tuple is immutable. This means that we cannot change a value in it.

**Dictionary –** A dictionary is a data structure that holds key-value pairs. We declare it using curly braces.

**Q.18. How would you convert a string into an int in Python?**

If a string contains only numerical characters, you can convert it into an integer using the int() function.

**Q.19. How do you calculate the length of a string?**

This is simple. We call the function len() on the string we want to calculate the length of.

**Q.20. What if you want to toggle case for a Python string?**

We have the swapcase() method from the str class to do just that.