

Python Interview Questions

Lavatech Technology

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1 Python Interview Questions for Freshers

1. What is Python? What are the benefits of using Python?

Answer:

Python is a high-level, interpreted, general-purpose programming language. Being a general-purpose language, it can be used to build almost any type of application with the right tools/libraries. Additionally, python supports objects, modules, threads, exception-handling, and automatic memory management which help in modelling real-world problems and building applications to solve these problems.

Benefits of using Python:

- Python is a general-purpose programming language that has a simple, easy-to-learn syntax that emphasizes readability and therefore reduces the cost of program maintenance. Moreover, the language is capable of scripting, is completely open-source, and supports third-party packages encouraging modularity and code reuse.
- Its high-level data structures, combined with dynamic typing and dynamic binding, attract a huge community of developers for Rapid Application Development and deployment.

2. What is a dynamically typed language?

Answer:

Before we understand a dynamically typed language, we should learn about what typing is. Typing refers to type-checking in programming languages. In a strongly-typed language, such as Python, "1" + 2 will result in a type error since these languages don't allow for "type-coercion" (implicit conversion of data types). On the other hand, a weakly-typed language, such as Javascript, will simply output "12" as result.

Type-checking can be done at two stages -

- Static - Data Types are checked before execution.
- Dynamic - Data Types are checked during execution.

Python is an interpreted language, executes each statement line by line and thus type-checking is done on the fly, during execution. Hence, Python is a Dynamically Typed Language.

2 Python Interview Questions for Experienced

1. Welcome



3 Python OOPS Interview Questions

1. How do you create a class in Python?

Answer:

To create a class in python, we use the keyword “class” as shown in the example below:

Code:

```
class InterviewbitEmployee:
    def __init__(self, emp_name):
        self.emp_name = emp_name
```

To instantiate or create an object from the class created above, we do the following:

Code:

```
emp_1=InterviewbitEmployee("Mr. Employee")
```

To access the name attribute, we just call the attribute using the dot operator as shown below:

Code:

```
print(emp_1.emp_name)
# Prints Mr. Employee
```

To create methods inside the class, we include the methods under the scope of the class as shown below:

Code:

```
class InterviewbitEmployee:
    def __init__(self, emp_name):
        self.emp_name = emp_name
    def introduce(self):
        print("Hello I am " + self.emp_name)
```

2. How does inheritance work in python? Explain it with an example.

Answer:

Inheritance gives the power to a class to access all attributes and methods of another class. It aids in code reusability and helps the developer to maintain applications without redundant code. The class inheriting from another class is a child class or also called a derived class. The class from which a child class derives the members are called parent class or superclass.

Python supports different kinds of inheritance, they are:

- **Single Inheritance:** Child class derives members of one parent class.

Code:

```
# Parent class
class ParentClass:
    def par_func(self):
        print("I am parent class function")

# Child class
class ChildClass(ParentClass):
    def child_func(self):
        print("I am child class function")

# Driver code
obj1 = ChildClass()
obj1.par_func()
obj1.child_func()
```

4 Python Pandas Interview Questions

1. Welcome



5 Numpy Interview Questions

1. Welcome



6 Python Libraries Interview Questions

1. Welcome



7 Python Programming Examples

1. Welcome

