

Online Programming with Python Training

Build a fantasy cricket game using Python Language

Duration: 6 weeks | Certified Training

About the 'Programming with Python' Training

The online training, Programming with Python, is a 6-week training program covering essential concepts on the building blocks of Python, object-oriented programming, the use of SQLite database and development of GUIs for Python applications. This training program has been created by Internshala to make the process of learning enjoyable yet effective. You will learn through videos, visual organizers and practice exercises. For a great hands-on learning experience, this training program is packed with assignments, assessment tests, code challenges, quizzes, and exercises. For doubt clearing, you can post your queries on the forum and get answers within 24 hours.

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1. Introduction to Python

Learn how to install Python, distinguish between important data types and use basic features of the Python interpreter, IDLE.

- 1.1. Installation of Python
- 1.2. Using the Python Interpreter IDLE
- 1.3. Salient Features of Python
- 1.4. Basic Syntax of Python

2. Using Variables in Python

Learn about numeric, string, sequence and dictionary data types and relevant operations while practicing Python syntax.

- 2.1. Data Types and Variables
- 2.2. Numeric Data Types
- 2.3. String Data Type
- 2.4. Sequence Data Type
- 2.5. Dictionary Data Type
- 2.6. Assignment

3. Basics of Programming in Python

Learn how to write programs using conditionals, loops, iterators and generators, functions and modules and packages.

- 3.1. Understanding Programs and Programming
- 3.2. Using Conditionals
- 3.3. Using Loops
- 3.4. Using Functions
- 3.5. Using Functions from Built-in Modules
- 3.6. Constructing Modules and Packages
- 3.7. Assignment

4. Principles of Object-oriented Programming (OOP)

Learn about the important features of Object-oriented Programming while using Classes and Objects, two main aspects of the OOP paradigm.

- 4.1. Overview of OOP
- 4.2. Declaring Class and Creating Object
- 4.3. Understanding Inheritance
- 4.4. Using Magic Methods
- 4.5. Assignment

5. Connecting to SQLite Database

Learn about relational databases while learning how to store and retrieve data from an SQLite database through Python.

- 5.1. Introduction to SQL
- 5.2. Creating an SQLite database
- 5.3. Accessing SQLite Database through Python
- 5.4. Assignment

6. Developing a GUI with PyQt

Learn how to install PyQt5 toolkit, Qt Designer and create a graphical user interface using common widgets and menu systems.

- 6.1. GUI and Event driven programming
- 6.2. Qt Designer
- 6.3. Using Common Widgets
- 6.4. Geometry Management
- 6.5. Designing Menu Systems
- 6.6. Assignment

7. Application of Python in Various Disciplines

Learn about various resources to extend your learning for the Python programming language.

FAQs

What is this training program about?

This is an online training on programming in Python - an interpreted, object-oriented, high-level programming language. After completing this training, you will be able to build a GUI-based Python application that uses a SQLite database for storage and retrieval of data.

How will the training be imparted?

This training will be delivered using video tutorials and interactive exercises.

What is the duration of this training?

This is a 6-week long training program. You will require approximately 2-3 hours per day to complete this training within the 6-week period.

What are the timings of this training program?

As this is an online training, you can choose to learn at any time of the day. We recommend that you spend 2-3 hours every day. If you have any questions while you are learning, you can ask the instructor at any time using the forum.

Who can join? I am a beginner/advanced user, is this training program for me?

This training would be better suited to beginners who have no prior knowledge of Python programming. Anyone who is willing to learn and has interest in Python can opt for this training program.

Are there any pre-requisites for joining this program?

This program is for beginners. There are no pre-requisites.

What are the benefits of joining the Programming with Python training program?

Being modular, dynamic, object oriented, portable, and extensible in C and C++, Python is much in demand. Python is an open source language. It is this particular feature, apart from code readability, that has led to its widespread acceptance in academia and industry. Also, Python is the future of machine learning and artificial intelligence. It has extensive coding tools like scientific python and numeric python which foster data analytics and statistics. Students who sign-up for this training program will learn basic programming and syntax, data types, OOP concepts, connecting Python programs with SQLite databases and GUI design for Python applications using Qt Designer.

What hardware/software are required for taking this training?

No special hardware is required for this training. You will need to install Python 3.6.2 which will be taught in the very first topic.

Will I get to work on a project?

Yes. The project problem statement will be inside the training.

Will there be a certificate provided at the end of the training?

Yes, a certificate will be provided by Internshala upon completion of the training. Students may download a soft copy of the certificate through our portal.

Can the material be used by a group of students?

No. These training programs are meant for individual users. Multiple users will not be allowed to access the portal using the same account.

If you have any queries or any doubts regarding the training, please write to us at trainings@internshala.com or call us on +91 844 8444 853.