

AI Task Planner

GOAL: Organise a 5step daily study routine for learning Python

Daily Study Routine for Learning Python

Day 1: Getting Started with Python Basics

1. **Install Python**

Download and install Python from the official website.

Set up your development environment (consider using Anaconda or Visual Studio Code).

2. **Introduction to Python Syntax**

Read through a beginner's tutorial or watch an introductory video.

Familiarize yourself with basic syntax, data types, and variables.

3. **Practice with the Python Shell**

Open the Python shell and try simple commands (e.g., print statements, basic math operations).

Day 2: Control Structures

1. **Learn about Conditionals**

Study if, elif, and else statements.

Watch a video tutorial that explains control flow.

2. **Understand Loops**

Learn about for loops and while loops.

Write small scripts to practice using loops with different data structures.

3. **Complete Exercises**

Use platforms like Codecademy or HackerRank to complete exercises related to control structures.

Day 3: Data Structures in Python

1. **Explore Lists and Tuples**

Read about lists and tuples, their properties, and when to use each.

Create and manipulate lists and tuples in Python.

2. **Understand Dictionaries and Sets**

Learn how dictionaries and sets work.

Write examples of each and practice common operations.

3. **Hands-On Exercises**

Solve practice problems that involve using different data structures on platforms like LeetCode.

Day 4: Functions and Modules

1. **Learn Function Basics**

Study how to define and call functions.

Understand parameters and return values.

2. **Explore Modules and Libraries**

Read about importing modules and using built-in libraries.

Practice using the math and random modules in small scripts.

3. **Create Your Own Functions**

Write a few functions to perform specific tasks, like calculating the factorial of a number.

Day 5: Final Project and Review

1. **Choose a Mini Project**

Select a simple project that incorporates everything you've learned (e.g., a calculator, a basic game, etc.).

2. **Work on Project**

Start coding your project, applying Python concepts learned throughout the week.

Document your code with comments.

3. **Review and Reflect**

Go over what you've learned this week.

Identify areas where you need further practice and set goals for next week.

Actionable Steps Summary

1. **Install Python and set up your environment.**

2. **Learn and practice Python syntax, control structures, and data structures.**

3. **Study functions and modules, creating your own functions.**

4. **Work on a mini project that showcases your understanding of Python.**

5. **Review your progress and plan future learning goals.**

Happy studying!