



1-Month Python Internship – Beginner-Friendly Weekly Tasks

Week 1: Python Basics & Control Structures

Goal: Understand the core building blocks of Python.

Steps to Follow:

1. Install Python from [python.org](https://www.python.org) or use [Google Colab](#)
2. Learn about:
 - o Variables, Data Types (int, float, string, boolean)
 - o Operators (+, -, *, /, %, etc.)
 - o if-else statements and loops (for, while)
3. Practice writing simple programs like:
 - o Calculator
 - o Even/Odd checker
 - o Multiplication table generator

Resources:

- YouTube: "Python for Beginners - FreeCodeCamp", "Programming with Mosh"
 - ChatGPT or Blackbox AI: Ask for code examples, explanations, or fixes
 - W3Schools, GeeksforGeeks for syntax help
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Week 2: Functions, Lists & Dictionaries

Goal: Learn how to organize code and store data efficiently.

Steps to Follow:

1. Learn how to define and call functions
2. Understand:
 - o Lists: storing items in order
 - o Dictionaries: storing data in key-value pairs
3. Task Example:
 - o Make a program that stores and displays student scores
 - o Add a function to calculate average score

 **Tip:** Ask ChatGPT “How do I create a list of student names and marks in Python?” or use Blackbox AI to autocomplete as you type.

Week 3: File Handling & Error Handling

Goal: Read and write data to files, handle errors smoothly.

Steps to Follow:

1. Learn how to open, read, and write to .txt or .csv files in Python
2. Understand try, except, finally blocks
3. Task Example:
 - Build a contact book or a mini journal that saves to a file

 **Try:** Ask ChatGPT or search YouTube for “How to read and write files in Python”

Week 4: Mini Project – Python Application

Goal: Apply everything you’ve learned in a real-world mini project.

Project Ideas:

- To-Do List CLI App
- Quiz Game
- Weather Info App using an API
- File Organizer

Steps:

1. Pick a project idea
2. Break it into smaller parts (e.g., input → logic → output → save data)
3. Use functions to organize code
4. Test and improve

 **For help:** Ask ChatGPT to explain project ideas step by step. Use YouTube for project tutorials.



2-Month Python Internship – Beginner Friendly Tasks

Weeks 1–4: Same as 1-month plan above

Week 5: Python Modules & Libraries

Goal: Learn to use external Python tools (libraries)

Steps:

1. Learn how to import modules (import math, random, datetime)
2. Explore:
 - random for generating passwords
 - datetime for working with dates
3. Task: Build a Password Generator with options for length and symbols

 Ask ChatGPT: “How to use the random library in Python to generate secure passwords?”

Week 6: APIs and JSON

Goal: Work with real-world data from the internet.

Steps:

1. Learn what APIs are (Application Programming Interface)
2. Use requests to fetch data from an API
3. Use json to process the data
4. Task: Build a Weather App or News App

 Search on YouTube: “Python API Tutorial for Beginners” or ask ChatGPT “How to get data from an API?”

Week 7: Data Analysis with Pandas

Goal: Learn how to analyze and manipulate data

Steps:

1. Install and import Pandas
2. Load a CSV file using pd.read_csv()
3. Use functions like .head(), .describe(), .groupby()
4. Task: Analyze student marks, COVID data, or your own expenses

 Try YouTube: “Pandas Tutorial for Beginners” or use ChatGPT: “How do I analyze a CSV file using Pandas?”

Week 8: Final Mini Project

Goal: Build something meaningful using Python and your new skills.

Project Ideas:

- Stock Tracker using API
- Student Result System
- File Organizer
- Daily Expense Tracker with CSV export

 Use ChatGPT to break your project into steps, or ask: “Help me create a step-by-step plan to build a file organizer in Python.”
