Things to Learn in Python to Get a Python Developer Job

1. Core Python (Fundamentals)

- Variables, data types, and operators
- Strings, lists, tuples, sets, dictionaries
- Control flow: if, for, while
- Functions and scope
- Exception handling
- Comprehensions (list, dict, set)
- File I/O
- Modules and packages

2. Object-Oriented Programming (OOP)

- Classes and objects
- Inheritance, encapsulation, and polymorphism
- __init__, __str__, __repr__, etc.
- Class vs instance variables
- Static and class methods

3. Advanced Python

- Decorators and generators
- Context managers (with statement)
- Iterators and custom classes
- Lambda, map, filter, reduce
- Typing and type hints (mypy)
- Multithreading and multiprocessing

- Working with virtual environments

4. Version Control

- Git and GitHub/GitLab/Bitbucket

- Branching, merging, pull requests

5. Web Development (if targeting web roles)

- Flask or Django

- REST APIs (building and consuming)

- JSON and HTTP methods

- Database integration (SQLite, PostgreSQL)

- ORM (SQLAlchemy or Django ORM)

6. Testing

- unittest, pytest

- Test-driven development (TDD)

- Mocking and coverage

7. Databases

- SQL basics (joins, aggregations)

- NoSQL (MongoDB - optional)

- Database design and performance

8. Frontend Basics (Optional)

- HTML, CSS, JavaScript basics

- AJAX, REST, working with APIs

9. Popular Libraries & Tools

- Requests
- Pandas and NumPy
- Matplotlib/Seaborn
- Celery
- Docker
- Jupyter Notebooks

10. Soft Skills & Other Areas

- Problem-solving (Leetcode, HackerRank)
- Writing clean, maintainable code (PEP8)
- Reading and understanding documentation
- Working in Agile/Scrum teams
- Communication and collaboration

Bonus Areas (Depending on Career Focus)

- Data Science: Scikit-learn, TensorFlow, PyTorch, statistics, ML
- DevOps/Scripting: Bash, Jenkins, CI/CD, AWS, monitoring tools
- Game Dev: Pygame, graphics basics
- Automation: Web scraping (BeautifulSoup, Selenium)

Recommended Practice Platforms:

- LeetCode, HackerRank, Exercism, Real Python