

# **LOKESH PRABHU**

## **Python & Git Assignments – Answers**

### **MCQs:**

1. c) list
2. b) float
3. b) def
4. b) Pip Installs Packages
5. b) git commit

### **Short Questions:**

#### **1. Differences between scripting and programming:**

Scripting is used for small tasks and automation, while programming is used to build full software applications

#### **2. Evolution of Python:**

Python was created by Guido van Rossum (1991). It evolved through major versions Python 2 and Python 3, becoming one of the most popular languages due to simplicity and versatility.

#### **3. What is Git and why is it used?**

Git is a version control system used to track code changes and collaborate with other coders.

#### **4. Purpose of a virtual environment:**

A virtual environment keeps each Python project's packages separate so they don't clash with each other

#### **5. Advantages of Jupyter Notebook:**

Jupyter Notebook lets you write code and see the output immediately in the same place, making learning, testing, and visualizing data very easy.

## MCQ'S

- a. C(list)
- b. B(float)
- c. B(def)
- d. A (python interpreter program)
- e. B (git commit)

## Short questions

1.what are the differences between scripting and programming?

Scripting languages are typically Interpreted and also flexible while programming languages are compiled. and used for applications

2.Explain the Evolution of python.

Python was a high programming language created by guido van Possum in 1991.

3. what is hit and why it is used?

It is used for collabarations, meetings and version managments. hit is a control version system.

4.What is the purpose of a virtual environment.

A environment isolates project dependencies, ensuring consistent and reproducible environments.

5. Explain advantages of Jupyter Note book.

Jupyter Notebook offers visualization, coding and documentation.

1. Which of the following is a mutable data type in Python?

answer - (a) tuple

2. What is the output of `print(type(10/2))`?

answer -(b) float

3. Which keyword is used to define a function in Python?

answer - (c) def

4. PIP stands for?

answer – (b) pip Install packages

5. Which command saves changes to local git repo?

answer –(b) git commit

1. What are the differences between scripting and programming?

ans-- a. scripting is used to to perform automative tasks and is smaller and less complex .

b. programming is used to create web app, site, app that is more complex and larger than scripting.

2. Explain the evolution of Python

ans -- python is developed by Guido van Rossum , it is an high level language and beginner friendly , widely popular language which is also crucial for machine learning projects.

3. What is Git and why is it used?

ans- Git is used to publish your project into network(cloud)where you can share or demonstrate your project and collaborate with other team members.

4. What is the purpose of a virtual environment?

ans- Virtual environment is a separate sandbox like place in which an team can work together on cloud(or other comuter) remotely .

5. Explain advantages of Jupyter Notebook.

ans- Jupyter notebook gives you feature to run code into cells format so you can run task on by one to check if it's working or has error that needs to be fixed.

### MCQ

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### MCQ

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3. Which keyword is used to define a function in Python?  
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4. PIP stands for?  
answer – (b) pip Install packages
5. 5. Which command saves changes to local git repo?  
answer –(b) git commit

### short question

1. What are the differences between scripting and programming?

Ans- **Scripting** is mainly used to automate tasks, connect different components, or control existing systems.

**Programming** is used to develop complete software applications, systems, and large programs.

2. Explain the evolution of Python

Ans- Python evolved from a simple scripting language to one of the most powerful and widely used programming languages in the world. Each version added new features that made Python more efficient, readable, and suitable for modern applications.

3. What is Git and why is it used?

Ans- Git is a **distributed version control system** used to track changes in files and manage projects efficiently. It was created by **Linus Torvalds** in 2005 to support the development of the Linux kernel.

4. What is the purpose of a virtual environment?

Ans- A **virtual environment** in Python is used to create an isolated environment for a project. It keeps that project's dependencies separate from other projects and from the system Python installation.

5. Explain advantages of Jupyter Notebook.

Ans- Jupyter Notebook is useful because it lets you **write code, see output, and add notes** all in one place, making learning, analysis, and collaboration easier.

