1.

Python is a high level, dynamic, interpreted, prototyping programming language. Here, programming language means that with some predefined set of instruction with the language, communication with the computer can be performed, high level means the syntax of python closely resembles to English, dynamic means the data types are assigned on the fly with the nature of the variables, interpreted meaning program executes line by line rather than as a whole and finally prototyping means without completing a whole code, a module can be generated and transported for feedback before final production.

2.

Features in Python

- 1. Easy to code
- 2. Free and Open Source
- 3. Object-Oriented Language
- 4. GUI Programming Support
- 5. High-Level Language
- 6. Extensible feature
- 7. Python is Portable language
- 8. Python is Integrated language
- 9. Interpreted Language
- 10. Large Standard Library
- 11. Dynamically Typed Language

3.

There are thousands of companies who are using python for their production level development. To name a few of the giant renowned companies:

Google, Facebook, Netflix, NASA, Instagram, Spotify, Quora, Dropbox, Reddit and many more.

4.

In today's world, python can be used in almost all aspects of computing related tasks. Some popular areas where we can use python:

- Web Development
- GUI Development
- Scientific and Numeric
- Software Development
- System Administration

Instagram can be a perfect example which is using python from the birth of this company. The areas described in task 4 would be elaborated to the context of the Instagram.

In 2016, the Instagram engineering team boasted that they were running the world's largest deployment of the Django web framework, which is written entirely in Python. Instagram has a very nice GUI, which can also be generated from python with its rich libraries. For the scientific and Numeric Computation in the context of python, there is no comparison other than python. In Instagram the use of data science and machine learning is praiseworthy. Python has rich libraries of numpy, pandas and many more to work with different numerical data and their computation and visualization.