**Data Science for Engineers**

**Lab Report 3**

**Hafiz Ahmad**

**19l-1316**

**Section-7A2**

Python libraries for Data Science and their utilization

**INTRODUCTION:**

Python is a free open-source programming language that is utilized in numerous scientific applications, data science, artificial intelligence, and web programming.Programmers who learn Python are able to concentrate on problem-solving rather than syntax.It has an advantage over languages like Java and C++ due to its relative size and simplified syntax, but the abundance of libraries gives it the power to do great things.Python Software:Today, Python is the programming language that is used the most.Python never fails to awe its users when it comes to finding solutions to problems and problems in data science.The majority of data scientists already use Python programming every day.Python is a high-performance, object-oriented, open-source, easy-to-learn, and easy-to-debug programming language with numerous additional advantages.For data science, Python was developed with exceptional Python libraries that programmers use every day to solve problems.The following libraries are on the list:TensorFlow, NumPy, SciPy, Pandas, Matplotlib, Keras, and SciKit-Learn are a few examples.

**OBJECTIVES:**

● To be able to use Python Libraries for python Programs.

● To get familiar with series and dataframes in python

**Application:**

Applications for Python include:

Machine learning and artificial intelligence, game development, data science and data visualization, desktop graphical user interfaces, web scraping applications, business applications, audio and video applications, CAD applications, and embedded applications are all examples of these areas.

**Issues:**

we never find any issue regarding this lab.

**Conclusion:**

This experiment has taught us the fundamentals of Python and its libraries.