

# libraries\_assignment

October 25, 2024

## 1 library

## 2 library is a collection of code that we can use in our program

mean asan lafzo logo kay code utha kay use karna apny task ko perform karny k lia

### 2.1 25 Libraries for data science

1. NumPy - Array operations and mathematical functions.
2. Pandas - Data manipulation and analysis.
3. Matplotlib - Plotting and visualization.
4. Seaborn - Statistical data visualization.
5. SciPy - Scientific computing and technical functions.
6. Scikit-Learn - Machine learning algorithms.
7. TensorFlow - Deep learning and neural networks.
8. Keras - Neural networks API, works with TensorFlow.
9. PyTorch - Deep learning library.
10. NLTK - Natural language processing.
11. spaCy - Advanced NLP processing.
12. Statsmodels - Statistical models and hypothesis testing.
13. XGBoost - Gradient boosting for efficient machine learning.
14. LightGBM - Gradient boosting for speed and accuracy.
15. CatBoost - Gradient boosting optimized for categorical data.
16. Plotly - Interactive graphs and dashboards.
17. Bokeh - Interactive data visualization.
18. Altair - Declarative statistical visualization.
19. Shapely - Geometric object manipulation.
20. PyCaret - Simplified machine learning workflow.
21. Orange - Data mining and machine learning.
22. Theano - Fast numerical computation.
23. SymPy - Symbolic mathematics.
24. H2O.ai - Machine learning with autoML features.
25. PyMC3 - Bayesian statistical modeling.
26. mlflow - Managing the ML lifecycle.
27. BeautifulSoup - Web scraping.
28. Scrapy - Web scraping framework.
29. Dask - Parallel computing with data science.
30. OpenCV - Computer vision tasks.