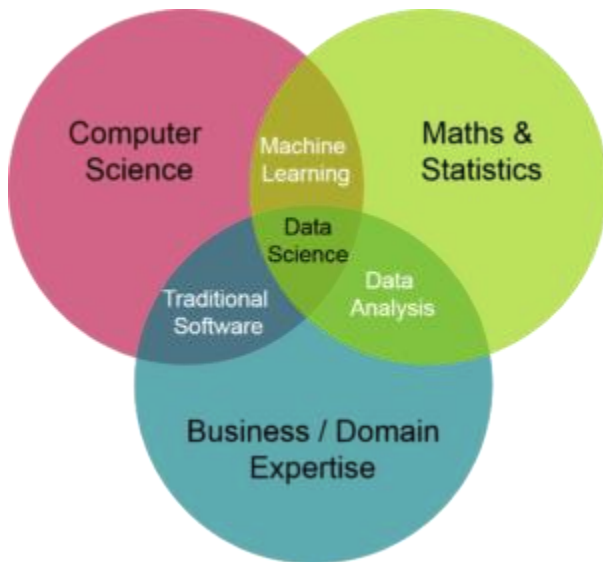# What Data Science and Process Cycle?

➢ **Data Science is the process of extracting insights from data. It involves the application of various techniques such as machine learning, artificial intelligence, natural language processing, and statistical analysis to uncover patterns and trends in data.**

➢ **The process cycle of Data Science includes the following steps:**

1. Data Collection: Collecting data from various sources such as databases, web APIs, and surveys.

2. Data Cleaning: Cleaning the data to remove any inconsistencies or outliers and Duplicated Data.

3. Exploratory Data Analysis: Analyzing the data to identify patterns and trends in the data.

4. Feature Engineering: Creating new features or transforming existing features to better represent the underlying data.

5. Model Building: Building predictive models using machine learning algorithms to make predictions about future events or outcomes based on past data.

6. Model Evaluation: Evaluating the performance of the model by measuring its accuracy, precision, recall, and other metrics.

7. Deployment: Deploying the model into production so that it can be used for real-time predictions or decisions making purposes