ASSINGMENT-1

1.WHAT IS DATA SCIENCE

\*Data science is the study of data to extract meaningful insights for business. It is a multidisciplinary approach

that combines principles and practices from the fields of mathematics, statistics, artificial intelligence, and computer engineering to analyze large amounts of data.

2.IMPORTANCE OF STATASTICS IN DATA SCIENCE

\*In data science, statistics is at the core of sophisticated machine learning algorithms, capturing and translating data patterns into actionable evidence.

Data scientists use statistics to gather, review, analyze, and draw conclusions from data, as well as apply quantified mathematical models to appropriate variables

3.WHAT IS DATA ENGENEERING

\*Data engineering is the process of designing and building systems that let people collect and analyze raw data from multiple sources and formats.

These systems empower people to find practical applications of the data, which businesses can use to thrive.

4.WHAT IS DATA VISULIZSASTION

\*Data visualization is the graphical representation of information and data. By using visual elements like charts, graphs, and maps

5.WHAT IS DATA CLEANING

\*Data cleaning is the process of fixing or removing incorrect, corrupted, incorrectly formatted, duplicate, or incomplete data within a dataset. When combining multiple data sources, there are many opportunities for data to be duplicated or mislabeled.

If data is incorrect, outcomes and algorithms are unreliable, even though they may look.

6.WHAT IS PHYTON AND WHY WE USE IT

\*Python is a computer programming language often used to build websites and software, automate tasks, and conduct data analysis.

Python is a general-purpose language, meaning it can be used to create a variety of different programs and isn't specialized for any specific problems.

7.WHAT IS DATA IN STATASTICS

\* Data are measurements or observations that are collected as a source of information.

8.WHAT IS STATASTICS

\*Statistics is the study and manipulation of data, including ways to gather, review, analyze, and draw conclusions from data.

9.WHAT IS MATHEMATICS

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Mathematics is the science and study of quality, structure, space, and change.

Mathematicians seek out patterns, formulate new conjectures, and establish truth by rigorous deduction from appropriately chosen axioms and definitions

10.WHAT IS COMPUTER SCIENCE

\*Computer Science is the study of computers and computational systems.

Unlike electrical and computer engineers, computer scientists deal mostly with software and software systems; this includes their theory, design, development, and application

11.WHAT IS PROGRAMMING LANGUAGE

\*A programming language is a computer language programmers use to develop software programs, scripts, or other sets of instructions for computers to execute.