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**Bytewise Fellowship Program** 

# DATA SCIENCE Task #1 BWT- Data Science (Group1)

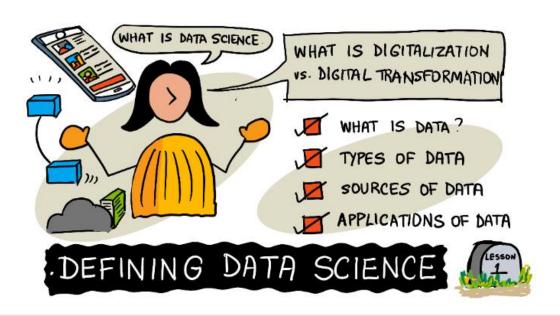
Submitted to: Mahrukh Khan Submitted by: Usama Malik Task: Understanding of Data science?

**Solution:** 

**Pre Quiz:** 



# **Defining Data Science**



#### Data:

Any information that provides useful insights is called data. We use computers for data processing rather than just for actual computation. This approach has allowed us to grow in various fields where we gather, clean, and utilize data to produce valuable outputs, providing us with a clear view rather than relying on manual calculations.

#### **Data Science:**

The goal of data science is to gather data, understand it, and extract useful information from it. In data science, we use statistics and probability. Data can be structured or unstructured, and based on our needs, we apply machine learning techniques, whether supervised, unsupervised, or regression, to extract the exact insights we need and much more.

#### Fields Related to Data Science:

Include databases, big data, machine learning, AI, and visualization.

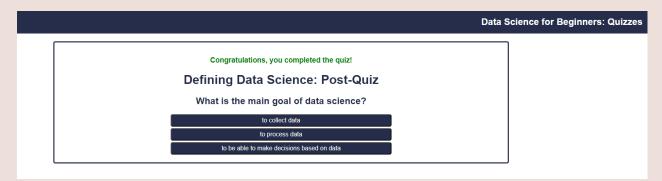
### **Types of Data:**

- Structured Data: Stored in a predefined format and is highly specific.
- Unstructured Data: A collection of various data types stored without a fixed structure.
- **Semi-Structured Data:** Does not follow a tabular data structure but has some organizational properties.

Where to Get Data: We can get data from various sources such as websites, text, images, social networks, surveys, etc.

What You Can Do with Data: We can store data, derive useful insights from it, and use it to make informed future decisions, identify where our products are lacking, and much more.

#### **Post Quiz:**



## **Data Science Life Cycle**

