**Preliminaries for Data Analysis**

**Instructions:**

Please share your answers filled in-line in the word document. Submit code separately wherever applicable.

Please ensure you update all the details:

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_**

**Batch ID:** \_\_\_\_\_\_\_\_\_\_\_

**Topic: Preliminaries for Data Analysis**

**Problem Statements:**

1. Identify the data type (continuous/discrete) for the following:

|  |  |
| --- | --- |
| Activity | Data Type |
| Number of sheep counted while trying to sleep | Discrete |
| Results of rolling a dice | Discrete |
| Weight of a person | Continuous |
| Weight of Gold | Continuous |
| Distance between two places | Continuous |
| Length of a leaf | Continuous |
| Dog's weight | Continuous |
| Blue Color | Discrete |
| Number of kids | Discrete |
| Number of tickets in Indian railways | Discrete |
| Number of times married | Discrete |
| Gender (Male or Female) | Discrete |
| Voltage | Continuous |
| Speed of the car | Continuous |
| Distance between planets | Continuous |
| The size of a two a bedroom flat | Continuous |
| Wind speed | Continuous |
| Facebook likes | Discrete |
| Votes in election | Discrete |
| Make up kits purchased | Discrete |
| Death toll in flood disaster | Discrete |
| The waiting time of customers in bank | Continuous |
| Price of iPhone in the market | Discrete |
| Stolen Cars | Discrete |

1. Identify the data types (Nominal, Ordinal, Interval, and Ratio)

|  |  |
| --- | --- |
| Data | Data Type |
| Gender | Nominal |
| High School Class Ranking | Ordinal |
| Celsius Temperature | Interval |
| Weight | Ratio |
| Hair Color | Nominal |
| Socioeconomic Status | Ordinal |
| Fahrenheit Temperature | Interval |
| Height | Ratio |
| Type of living accommodation | Nominal |
| Level of Agreement | Ordinal |
| IQ (Intelligence Scale) | Interval |
| Sales Figures | Ratio |
| Blood Group | Nominal |
| Time of Day | Interval |
| Time on a Clock with Hands | Interval |
| Number of Children | Ratio |
| Religious Preference | Nominal |
| Barometer Pressure | Ratio |
| SAT Scores | Interval |
| Years of Education | Ratio |
| Size of egg | Ratio |
| Monthly Income | Ratio |
| Unemployment rate | Ratio |
| Military Rank | Ordinal |
| Shoe size | Ordinal |
| Pulse rate | Interval |
| Vital capacity | Ratio |
| Favorite candy bar | Nominal |
| Name of the Grains | Nominal |
| Pesticides level | Ordinal |
| Tribe of origin | Ratio |
| Help Desk Service Satisfaction Score | Ordinal |
| Ethnicity | Nominal |
| Marital status | Nominal |
| Type of Residence | Ordinal |
| Swimming level | Ordinal |
| Amount of Money | Ratio |
| Colors of paint | Nominal |
| Weekly Food spending | Ratio |

3. Identify whether the data is qualitative or quantitative:

|  |  |
| --- | --- |
| Data | Data Type (Qualitative/Quantitative) |
| I bought Strawberry lipstick today | Qualitative |
| Happiness rating | Quantitative |
| Duration of red-light signal | Quantitative |
| I like butterscotch ice cream | Qualitative |
| Setosa belongs to Iris family of flowers | Qualitative |
| cold Coffee | Qualitative |
| The Tea smells good | Qualitative |
| Dress Size | Quantitative |

1. Identify whether the data is categorical or numerical for the following:

|  |  |
| --- | --- |
| Data | Data Type (Categorical / Numerical) |
| Product type | Categorical |
| Native language | Categorical |
| Type of teaching approach | Categorical |
| Virus in a System | Categorical |
| Covid-19 Positive Cases | Numerical |
| Lockdown Days | Numerical |

1. Identify whether the data is structured or unstructured for the following:

|  |  |
| --- | --- |
| Data | Data Type (Structured/Unstructured) |
| Credit card numbers | Structured |
| Transaction information | Structured |
| Text files | Unstructured |
| Images | Unstructured |
| Music files | Unstructured |
| Credit card numbers | Structured |