1. **Discuss the difference between data and information. Provide examples from the real world for each term.**
   Data is raw, unprocessed, unorganized facts/ information which has no meaning when it stands alone. Data can be presented in Text, numbers, special characters, images, audio, video, graphics, and animation.

   Information
   Information is organized, structured, and processed data which is meaningful and be able to make decisions based on it.

   Differences between data and information

Data	Information
Raw facts	Processed facts
Just text and numbers	Refined data
Records and observations	Analysis
Unorganized	organized
Does not depend on information	Without data information cannot be produced
Ex: Marks of students Price of each goods bought	Ex: Average Marks of students Total price of goods bought

2. **What are the two data-gathering methods? Give examples for each method.**
   Manual data- The data that is collected manually through interviews, observations, questionnaires, surveys, and forms.

   Computerized data- Data that is collected using computers through automated systems, sensors, QR codes, Bar codes, Fingerprints, Voice recognition systems, POS.

3. **Using examples from the real world discuss how we interact with data in our day-to-day life.**
   Usage of texts, images for texting
   Observing the whether
   Reading the news

4. **Considering the below characteristics, discuss the differences between data and information.**
   a) **Nature-**
      a. **Data:** Unprocessed, unorganized, raw facts.
      b. **Information:** processed, organized, structured data.

   b) **Meaningfulness –**
      a. **Data:** Not meaningful
      b. **Information:** Meaningful

   c) **Interdependency-**

a. **Data:** Does not depend on information
b. **Information:** Cannot be processed without data

5. **Information is organized or classified data with meaningful values for the receiver. For the decision to be meaningful, the processed data must qualify for different characteristics. Discuss the characteristics that define meaningful data.**
    - Accuracy
    - Reliability
    - Completeness
    - Relevancy
    - Timeliness

6. **Data processing is the re-structuring or re-ordering of data by people or machines to increase their usefulness and add value for a particular purpose. Discuss the steps in the data processing cycle.**