* 1. Data refers to raw facts, collected for reference or analysis such as a telephone number, customer name or birth date. Unless they have been organized in some logical manner, data have little meaning. A single character is the smallest piece of data that can be recognized by a computer. It requires only 1 byte if a computer storage
  2. Field refers to a character or group of characters that have a specific meaning. It is used to define and store data
  3. Record is a logically connected set of one or more fields that describes a person, place or thing
  4. File is a collection of related records

1. A Database Management System (DBMS) is a collection of programs which works to manage the database structure and control access to the data stored in the database

***Advantages of DBMS***

* **Better Data sharing** – By managing the database and controlling access to data within it, the DBMS makes it possible for end-users to have more efficient access to data that is better managed.
* **Improved data integration** – By facilitating a variety of end-users to access data in a well-managed manner, the DBMS helps to provide a clearer and more integrated view of the organization’s operation to the end-users.
* **Minimized data inconsistency** – Data inconsistency occurs when different versions of the same data appear in different places. A properly designed database greatly reduces the probability of data consistency as data is drawn from a variety of sources or end-users.
* **Improved data access** – A query is a specific request for data manipulation sent to the DBMS. The DBMS makes it possible to produce quick answers to spur-of-the-moment queries.
* **Improved decision making** – Better quality information is generated due to better-managed data and improved data access.
* **Increased end-user productivity** – The availability of data and the ability to transform data into usable information encourages end-users to make quicker and more informed decisions.

1. Data refers to raw facts, not analyzed and as such has little to no meaning. Information on the other hand refers to processed, organized data presented in a given context and is useful to humans.
2. Metadata refers to data that provides information about other data, it is commonly known as ‘Data about data’. Metadata can be created manually to be more accurate, or automatically and obtain more basic information.

E) The file contains 4 records.

F) There are 5 fields per record.