L2T02-Databases Task 1

1a) Data: Data are raw facts that until organised will often have little meaning. Examples include: birth dates, telephone numbers, names etc. (The info that goes into a file).

b) Field: A field is a character or group of characters that has a specific meaning. It is used to define and store data. (Often goes as a column in a table)

c) Record: A record is a logically connected set of one or more fields that describes a person, place or thing. (Often goes as a row in a table)

d) File: A file is a collection of related records. (Often looks like a table)

2. What is a DBMS and what are its advantages?

It is a database management system, and it manages the data content. A DBMS is a collection of programs, which works to manage the database structure and control access to the data stored in the database. The DBMS serves as an intermediary between the user and the database. It receives all application requests and translates them into the complex operations required to fulfil those requests.

Advantages include:
1. Allows data in the database to be shared among multiple applications or users.
2. DBMS integrates many different user's views of the data into a single repository
3. Better data sharing
4. Improved data integration
5. Minimised data inconsistency
6. Improved data access
7. Improved decision making
8. Increased end-user productivity

3. Explain the difference between data and information

Data are raw facts. Raw data has not yet been processed to reveal its meaning. Information, on the other hand, is the result of processing raw data to reveal its meaning. Data processing refers to a whole spectrum of activities: it can be as simple as organising data to identify patterns in it, or as complex as using statistical modelling to draw inferences from your dataset. Decision making relies on information, not just raw data.

4. What is metadata?

Metadata is data that provides information about other data. It summarizes basic information about data, making finding and working with particular instances of data easier. It doesn't tell you what the content is, but describes the type of thing that it is.

5.

PROJECT_COD E	PROJECT_MANAGER	MANAGER_PHONE	MANAGER_ADDRESS	PROJECT_BID_PRI CE
21-5U	Holly Parker	33-5-592000506	180 Boulevard du General, Paris, 64700	$13179975.00
21-7Y	Jane Grant	0181-898-9909	218 Clark Blvd, London, NW3, TRY	$45423415.00
25-9T	George Dorts	0181-227-1245	124 River Dr, London, N6, 7YU	$78287312.00
29-7P	Holly Parker	33-5-592000506	180 Boulevard du General, Paris, 64700	$20883467.00

e) Number of records?: 4

f) Number of fields per record?: 5