

Assignment - 2

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1) What is data mining? Explain different types of data on which mining can be performed.

- Data mining is a process of discovering pattern in large data sets

1) Flat Files: Data File in text form or binary form with a structure

2) Relational Database: Collection of data organized in tables with rows and columns

3) Data Warehouse = Collection of data integrated from multiple sources that will queries & decision making.

2) What kind of pattern can be mined

- Data mining functionality are used to specify the kind of pattern to be found in data mining

- concept discrimination
- classification & regression
- clustering analysis
- outlier analysis

3) Explain integration of data mining system to database or data warehouse.

1) No coupling: DM system will not utilize any function of DB or Del system.

2) loose coupling: DM system will use some functionality of DB or Del system.

3) semi-tight coupling: Besides linking a DM system to DB/Del system efficient implementation of few essential data mining primitive can be provided in the DB/Del system.

4) tight coupling: DM system is smoothly integrated into the DB/Del system.

4) Explain major issues in DM.

1) Mining methodology & user interaction.

- mining different kind of knowledge in databases

- Interactive mining of knowledge at multiple levels of abstraction.

- Incorporation of background knowledge.

2) Performance issues:

- efficiency and scalability of data mining

eg algorithm.

- parallel distributed & incremental mining algo.

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(5) Explain data mining as step of knowledge discovered process.

- 1) Data cleaning: cleaning in case of missing value.

- cleaning noisy data, where noise is random.

2) Data Integration: Using Data Migration tools.

- using ~~data~~ ETL process.

3) Data selection: where data relevant to the decided and retrieved from data collection.

4) Data transformation: process of transforming data into appropriate form required by mining procedure.