QUESTION NO.: 1

Steps involved in KDD Process:

Data Cleaning: Removal of noisy and irrelevant data from collection is called collection.

cleaning in case of missing values.

cleaning noisy data, where noise is a random or variance error.

It is cleaned with data discrepancy detection and Data transformation tools.

Data Integration: Data integration is defined as heterogeneous data from multiple sources combined in a common source (DataWarehouse)

Data Integration using Migration tools, synchronization tools, ETL (Extract-Load-Transformation) process.

Data selection: Data selection is defined as the process where data relevant to the analysis is decided and retrived from the data collection.

Data selection using Neural Network, Decision trees, Naive Bayes, etc.

Scanned with CamScanner

QUESTION NO.: 2

ACID Properties

Atomicity: It is defined as defines that data remains atomic. It means if any operation is performed on the data, it should be performed or executed completely or should not be executed at all. In case of operations a transaction, the operation should be completely executed not partially.

Consistency: The word consistency means that value should remain preserved always. In case transactions, the integrity of the data is very essential so database remains consistent. data always correct.

Isolation: Means seperation. Property of database where no data should affect other one and may occur concurrently. Operation on one begin when operation on first database gets completed.

Durability: Ensures permanency of something. In DBMS it, ensured successful execution of operation becomes permanent in the database.

Scanned with CamScanner

QUESTION NO.: 3

Java defined OOP concepts as follows:

Abstraction: Using simple things to represent complexity. We all know to turn ~~abstraction~~ on TV or ~~on~~, we don't need to know how it works to enjoy it. In java, abstraction means simple things like objects, classes and variables represent more complex underlying code and data. It lets you avoid repeating some work.

Encapsulation: The practice of keeping fields within a class private, then providing access to those fields ~~as~~ via public methods. It is protective barrier that keeps the data and code safe ~~and~~ within the class itself. ~~We~~ we can reuse ~~of~~ objects like code components or variables. Its a powerful, time saving OOP concept in Java

Inheritance: A special feature of OOP in java, inheritance lets programmers create new classes that share some work without reinventing the wheel. we all ~~inheriting~~ inheriting class a subclass or a child class.

Polymorphism: Allows programmers to use the same word in Java to mean different things in different things in different contexts.

Scanned with CamScanner

QUESTION NO.: 4

There are foure types of database languages.
- Data Defination language, (DDL),
- Data Manipulation language (DML),
- Data control dangage (DCL),
- Transaction control language (TCL).

DDL :- It is used to define the Structure of database by Specifying the Schema. It provides facility to define schema and creation of tables, Indexes.
It also Allows to Alter the table details like changing the column name.
Commands :- CREATE, ALTER, DROP, RENAME.

DML :- It provides features to insert the data in columns. Also provide the update, delete and retreving features from table.
basic commands for DML are:
SELECT, INSERT, UPDATE, DELETE.

DCL :- It controls the access level of dara that user Stores within database. It Simply provides the rights and permissions of database System.

Scanned with CamScanner

QUESTION NO.: 4

Simple commands :- GRANT, REVOKE.

4). Transaction control language :-

It tries to maintain the consistency of the transaction. It is very important to maintain ACID properties.

Commands :- COMMIT, ROLLBACK.

Scanned with CamScanner

QUESTION NO.: 5

A Kernel is considered the most critical part of a computer operating system, acting as the heart of the operating system that provides the essential services. with the operating system, kernel is also loaded into memory and remains in memory until the operating system is not shut. It performs various tasks such as memory management, risk management, and task management.

Scanned with CamScanner