

ABDULRAHMAN AL-SUMAIT UNIVERSITY Faculty of Science

Department of Mathematics and Computer Science

CS364: HUMAN RESOURCES INFORMATION SYSTEM

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QUESTIONS:

- 9. a) Define the term "query" and discuss three types of enquiries
- b) Identify the key fields in an HR database

1. Definition of "Query": In the context of databases, a query refers to a request for information or data retrieval from a database management system (DBMS). It is a structured command or statement written in a specific query language, such as SQL (Structured Query Language), that is used to communicate with a database and retrieve desired information. Queries allow users to search, filter, and manipulate data stored in the database based on specific criteria or conditions.

2. Types of Enquiries:

Select Query: A select query is the most common type of query used in databases. It retrieves data from one or more tables based on specified conditions and returns a result set containing the selected data. Select queries are used to search for specific records, filter data based on certain criteria, and perform calculations or aggregations on the retrieved data.

Example: SELECT column1, column2 FROM table_name WHERE condition;

Update Query: An update query is used to modify existing data in a database. It allows users to update one or more records in a table based on specified conditions. Update queries are commonly used to change the values of specific fields or columns in a table.

Example: UPDATE table_name SET column1 = value1, column2 = value2 WHERE condition;

Insert Query: An insert query is used to add new records or data into a database. It allows users to insert one or more rows of data into a table. Insert queries specify the table name and the values to be inserted into each column.

Example: INSERT INTO table_name (column1, column2) VALUES (value1, value2);

- b) Key fields in an HR database can vary based on the specific requirements of an organization. However, some commonly found key fields in an HR database may include:
 - 1. Employee ID: A unique identifier assigned to each employee in the database.
 - 2. Personal Information: Fields such as name, date of birth, gender, contact details, and address.
 - 3. Employment Information: Fields related to employment status, job title, department, hire date, termination date (if applicable), and employee status (full-time, part-time, contractor, etc.).
 - 4. Compensation and Benefits: Fields related to salary, pay grade, bonuses, allowances, benefits, and any other financial information associated with employee compensation.
 - 5. Leave and Attendance: Fields related to tracking employee attendance, leave balances, types of leave (sick leave, vacation, etc.), and leave history.

- 6. Training and Development: Fields related to employee training programs, courses attended, certifications, and skill development.
- 7. Performance Management: Fields related to performance appraisals, goals, performance ratings, feedback, and performance history.
- 8. Employee Relations: Fields related to employee grievances, disciplinary actions, complaints, and any other employee-related issues or incidents.
- 9. Organizational Hierarchy: Fields that define the reporting structure, including managers, supervisors, and team members.
- 10. Document Management: Fields related to employee documents such as contracts, resumes, performance reviews, and other relevant files.