DBMS LAB INTERNAL

SET - 3

Tables:

1. Employees

- Primary Key: employee_id (integer)
- Columns: employee_id, first_name, last_name, department, hire_date

2. Projects

- Primary Key: project_id (integer)
- Columns: project_id, project_name, start_date, end_date

3. Assignments

- Primary Keys: employee_id (references Employees.employee_id), project_id (references Projects.project_id)
- Columns: employee_id, project_id, hours_worked

Sample Data:

Table: Employees

employee_id	first_name	last_name	department	hire_date
1	John	Smith	IT	2022-03-15
2	Jane	Johnson	HR	2021-06-20
3	Michael	Brown	Marketing	2023-01-10
4	Emily	Davis	Finance	2020-09-05
5	David	Lee	IT	2023-05-02

Table: Projects

project_id	project_name	start_date	end_date
101	Project A	2023-03-01	2023-06-30
102	Project B	2023-05-15	2023-08-31
103	Project C	2022-11-20	2023-01-31
104	Project D	2023-04-10	2023-09-30
105	Project E	2023-02-15	2023-05-31

Table: Assignments

employee_id	project_id	hours_worked
1	101	120
2	101	90
1	102	80
3	103	40
5	101	100

1. Retrieve the names of all employees in alphabetical order.

2. Retrieve the average number of hours worked on projects.

3. Retrieve the project names and the number of employees assigned to each project.

4. Retrieve the names of employees who have worked on more than one project.

5. Retrieve the project names and the total number of hours worked on each project.

6. Retrieve the average age of employees in each department.

7. Retrieve the names of employees who have been hired before the year 2022.

8. Retrieve the names of employees who have worked on a project with more than 100 hours.