Consider the following schema.

**Emp( *eid:* integer, *ename:* string, *age:* integer, *salary:* real)**

**Works (eid*:* integer, *did:* string, *pct-time:* integer)**

**Dept( did: string, *budget:* real, *managerid:* integer)**

An employee can work in more than one department; the *pct-time* field of the Works relation shows the percentage of time that a given employee works in a given department. *Managerid* filed shows the employee id of the manager who manages the department.

Create SQL statements for the following.

1. Create the emp table with the following conditions.
2. Name of the employees cannot be null
3. Employee salary should be greater than zero
4. Create the dept table as given in the schema
5. Create the works table with the required foreign key constraints
6. Insert the following row to the emp table

|  |  |  |  |
| --- | --- | --- | --- |
| **eid** | **Ename** | **age** | **Salary** |
| 1000 | Ruwan | 33 | 40000 |

1. Add a column named *hireDate* to the employee table. Default value for the *hireDate* should be the current date.
2. Update the hireDate of the above employee to 1st January 2010.
3. Delete the row inserted in question 4.
4. Delete the hire date column from the emp table
5. Delete the emp table from the database
6. Display the name and the salary of all employees
7. List the name and the salary of all employees in the descending order of his/her salary.
8. Display the name and the salary of all employees who obtain a salary greater than 50000.
9. Display the name of all employees whose name starts with a letter ‘S’
10. For each department display the department name and the name of the manager.
11. For each employee who is earning more than 75000 display the name of the employee and the id of the manager.
12. Display the names of employees who are not assigned to any department yet.
13. Display the names and the ages of each employee who works in either ‘ITSD’ or ‘Academic’ departments.
14. Display the names and the ages of each employee who works in both ‘ITSD’ and ‘Academic’ departments.
15. For all departments, display the name of the department and the names of the employees working in it.
16. Display the minimum and maximum salary of employees.
17. Display the employees’ name and the total percentage he/she has worked in total.
18. Display the department name and the number of employees in each department.
19. Display the names of the employee who work more than 90%.
20. Display the name of departments who have the total of salary exceeding 100000 LKR.
21. Display the name of each employee whose salary exceeds the budget of all departments that he or she work in.
22. Find the manager ids of managers who manage only departments with budgets greater than 1000000 LKR.
23. Find the name of the manager who manages the departments with the largest budget.
24. If a manager manages more than one department, he or she controls the sum of all the budgets for those departments. Find the manager id of the managers who control more than 5,000,000 LKR.
25. Find the manager id of manager who controls the largest amount.

