

Some Practice Database SQL Questions

WorksOn Database:

```
emp (eno, ename, bdate, title, salary, dno)
proj (pno, pname, budget, dno)
dept (dno, dname, mgreno)
workson (eno, pno, resp, hours)
```

Questions:

- 1) Write an SQL query that returns the project number and name for projects with a budget greater than \$100,000.
- 2) Write an SQL query that returns all works on records where hours worked is less than 10 and the responsibility is 'Manager'.
- 3) Write an SQL query that returns the employees (number and name only) who have a title of 'EE' or 'SA' and make more than \$35,000.
- 4) Write an SQL query that returns the employees (name only) in department 'D1' ordered by decreasing salary.
- 5) Write an SQL query that returns the departments (all fields) ordered by ascending department name.
- 6) Write an SQL query that returns the employee name, department name, and employee title.
- 7) Write an SQL query that returns the project name, hours worked, and project number for all works on records where hours > 10.
- 8) Write an SQL query that returns the project name, department name, and budget for all projects with a budget < \$50,000.
- 9) Write an SQL query that returns the employee numbers and salaries of all employees in the 'Consulting' department ordered by descending salary.
- 10) Write an SQL query that returns the employee name, project name, employee title, and hours for all works on records.

Answers:

- 1) Write an SQL query that returns the project number and name for projects with a budget greater than \$100,000.

```
SELECT pno, pname
FROM proj
WHERE budget > 100000
```

Note: Do not include comma or dollar sign in query.

- 2) Write an SQL query that returns all works on records where hours worked is less than 10 and the responsibility is 'Manager'.

```
SELECT *
FROM workson
WHERE hours < 10 AND resp = 'Manager'
```

- 3) Write an SQL query that returns the employees (number and name only) who have a title of 'EE' or 'SA' and make more than \$35,000.

```
SELECT eno, ename
FROM emp
WHERE (title = 'EE' OR title = 'SA') AND salary > 35000
```

Note: Parentheses are required.

- 4) Write an SQL query that returns the employees (name only) in department 'D1' ordered by decreasing salary.

```
SELECT ename
FROM emp
WHERE dno = 'D1'
ORDER BY salary DESC
```

Note: Can sort on field not in output - did not need to put salary in SELECT.

- 5) Write an SQL query that returns the departments (all fields) ordered by ascending department name.

```
SELECT *
FROM dept
ORDER BY dname ASC
```

- 6) Write an SQL query that returns the employee name, department name, and employee title.

```
SELECT ename, dname, title
FROM emp, dept
WHERE emp.dno = dept.dno
```

- 7) Write an SQL query that returns the project name, hours worked, and project number for all works on records where hours > 10.

```
SELECT pname, hours, proj.pno
FROM workson, proj
WHERE hours > 10 AND proj.pno = workson.pno
```

- 8) Write an SQL query that returns the project name, department name, and budget for all projects with a budget < \$50,000.

```
SELECT pname, dname, budget
FROM proj, dept
WHERE budget < 50000 AND proj.dno = dept.dno
```

- 9) Write an SQL query that returns the employee numbers and salaries of all employees in the 'Consulting' department ordered by descending salary.

```
SELECT eno, salary
FROM emp, dept
WHERE dname = 'Consulting'
ORDER BY salary DESC
```

- 10) Write an SQL query that returns the employee name, project name, employee title, and hours for all works on records.

```
SELECT ename, pname, title
FROM emp, proj, workson
WHERE emp.eno = workson.eno and proj.pno = workson.pno
```