

Database Lab 2

Question 1

Show details of all employees in the Employee table.

The screenshot shows a database management tool interface. The top bar indicates a warning: "tudublin - Warning - not supported". The main window is titled "Question1" and contains a SQL query editor with the following code:

```
1 use tudublin;
2 SELECT * FROM EMP;
3
```

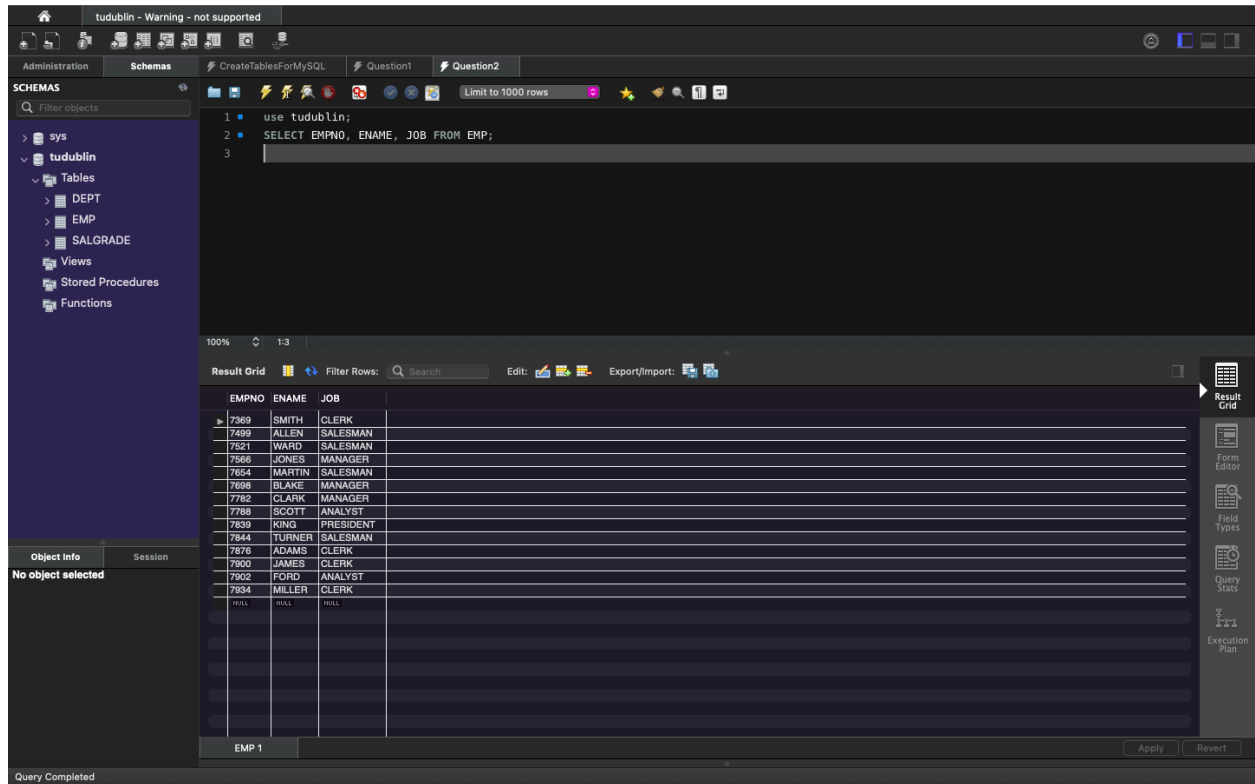
The query results are displayed in a "Result Grid" below the editor. The grid shows 14 rows of employee data. The columns are: EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, and DEPTNO. The data is as follows:

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	SMITH	CLERK	7902	1980-12-17	800.00	NULL	20
7499	ALLEN	SALESMAN	7698	1981-02-20	1600.00	300.00	30
7521	WARD	SALESMAN	7698	1981-02-22	1250.00	500.00	30
7566	JONES	MANAGER	7839	1981-04-02	2975.00	NULL	20
7654	MARTIN	SALESMAN	7698	1981-09-28	1250.00	1400.00	30
7698	BLAKE	MANAGER	7839	1981-05-01	2850.00	NULL	30
7782	CLARK	MANAGER	7839	1981-06-01	2450.00	NULL	10
7788	SCOTT	ANALYST	7566	1982-12-09	3000.00	NULL	20
7839	KING	PRESIDENT	NULL	1981-11-14	5000.00	NULL	10
7844	TURNER	SALESMAN	7839	1981-09-08	1500.00	0.00	30
7876	ADAMS	CLERK	7788	1983-01-12	1100.00	NULL	20
7900	JAMES	CLERK	7898	1981-12-03	950.00	NULL	30
7902	FORD	ANALYST	7566	1981-12-03	3000.00	NULL	20
7934	MILLER	CLERK	7782	1982-01-23	1300.00	NULL	10

The interface also includes a sidebar on the left with a tree view showing the database structure (sys, tudublin, Tables, DEPT, EMP, SALGRADE, Views, Stored Procedures, Functions). The bottom status bar shows "Opening ...".

Question 2

Display the employee number, name and job in the Employee table.



Question 3

Display the department number that each employee works in.

The screenshot shows a database management interface with a dark theme. The top bar indicates the database is 'tudublin' with a warning 'Warning - not supported'. The 'SCHEMAS' panel on the left shows a tree view with 'sys' and 'tudublin' (containing Tables, Views, Stored Procedures, and Functions). The 'Tables' sub-panel is expanded, showing 'DEPT', 'EMP', and 'SALGRADE'. The main SQL editor displays a query:

```
1 use tudublin;
2 SELECT EMPNO, DEPTNO FROM EMP;
3
```

The 'Result Grid' shows the query results with columns 'EMPNO' and 'DEPTNO'. The results are as follows:

EMPNO	DEPTNO
7782	10
7639	10
7934	10
7369	20
7566	20
7788	20
7676	20
7902	20
7489	30
7521	30
7654	30
7698	30
7844	30
7900	30
NULL	NULL

The bottom status bar indicates 'Query Completed'.

Question 4

Display the employee number, name and occupation for all employees employed as clerks.

The screenshot shows a database management tool interface. The top menu bar includes 'Administration', 'Schemas', and tabs for 'CreateTablesForMySQL', 'Question1', 'Question2', 'Question3', and 'Question4'. The left sidebar, titled 'SCHEMAS', shows a tree view with 'sys' and 'tudublin'. Under 'tudublin', there are 'Tables' (DEPT, EMP, SALGRADE), 'Views', 'Stored Procedures', and 'Functions'. The main query editor displays the following SQL code:

```
1 use tudublin;
2 SELECT EMPNO, ENAME, JOB FROM EMP WHERE JOB = 'CLERK';
3
```

Below the query editor, the 'Result Grid' shows the results of the query. The grid has columns for EMPNO, ENAME, and JOB. The results are as follows:

EMPNO	ENAME	JOB
7369	SMITH	CLERK
7676	ADAMS	CLERK
7900	JAMES	CLERK
7934	MILLER	CLERK
NULL	NULL	NULL

The bottom status bar indicates 'SQL script saved to 'J:\Users\dany\Desktop\DataBase\Lab2\Queries\Question4.sql''.

Question 5

Display the name and salary of employees earning more than \$2850.

The screenshot shows a database management interface with a dark theme. The top bar indicates a warning: "tudublin - Warning - not supported". The interface includes a sidebar for "SCHEMAS" with a tree view showing the database structure: sys, tudublin (Tables: DEPT, EMP, SALGRADE; Views; Stored Procedures; Functions), and Functions. The main editor displays a SQL script:

```
1 use tudublin;
2 SELECT ENAME, SAL FROM EMP WHERE SAL > 2850;
3
```

Below the editor, the "Result Grid" shows the query results. The grid has columns for "ENAME" and "SAL". The results are as follows:

ENAME	SAL
JONES	2975.00
SCOTT	3000.00
KING	5000.00
FORD	3000.00

The bottom status bar indicates the SQL script was saved to "/Users/dany/Desktop/DataBase/Lab2/Queries/Question5.sql".

Question 6

Display the name and salary of all employees earning less than \$2500.

The screenshot shows a database management interface with a dark theme. The top bar indicates a warning: "tudublin - Warning - not supported". Below this, there are tabs for "Administration" and "Schemas". The "Schemas" tab is active, showing a tree view of the database structure. The tree view includes "sys", "tudublin", "Tables", "Views", "Stored Procedures", and "Functions". The "Tables" folder is expanded, showing "DEPT", "EMP", and "SALGRADE".

The SQL editor shows the following query:

```
1 use tudublin;
2 SELECT ENAME, SAL FROM EMP WHERE SAL < 2850;
3
```

The "Result Grid" shows the results of the query. The columns are "ENAME" and "SAL". The data is as follows:

ENAME	SAL
SMITH	800.00
ALLEN	1600.00
WARD	1250.00
MARTIN	1250.00
CLARK	2450.00
TURNER	1500.00
ADAMS	1100.00
JAMES	950.00
MILLER	1300.00

The bottom status bar shows "Query Completed" and "Read Only".

Question 7

Display the employee name and department number for employee number 7566.

The screenshot shows a SQL IDE interface with a dark theme. The top toolbar includes icons for file operations and a warning message: "tudublin - Warning - not supported". The "Schemas" panel on the left shows a tree view with "sys" and "tudublin" (expanded to show "Tables", "Views", "Stored Procedures", and "Functions"). The main editor displays a SQL script:

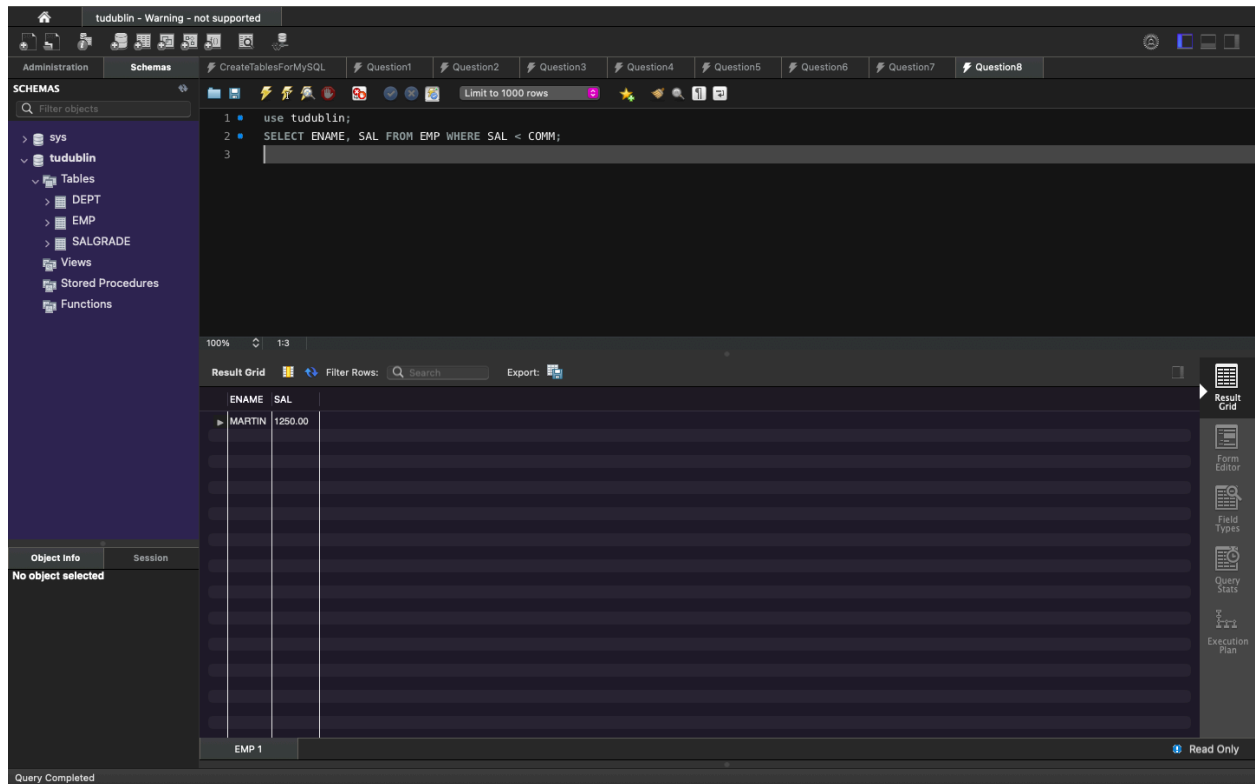
```
1 use tudublin;
2 SELECT ENAME, DEPTNO FROM EMP WHERE EMPNO = 7566;
3
```

Below the editor, the "Result Grid" shows the query results. The first row is highlighted, showing "JONES" in the "ENAME" column and "20" in the "DEPTNO" column. The grid has columns for "ENAME" and "DEPTNO". The status bar at the bottom indicates "EMP 2" and "Read Only". A footer message states: "SQL script saved to 'J:\Users\dany\Desktop\DataBase\Lab2\Queries\Question7.sql'".

ENAME	DEPTNO
JONES	20

Question 8

Display the names and salaries of all employees whose salary is less than their commission.



Question 9

Display the names and salaries of employees earning between 1500 and 3000 a month.

The screenshot shows a database management interface with a dark theme. The top bar indicates the database is 'tudublin' with a warning 'Warning - not supported'. Below the top bar is a navigation menu with 'Administration' and 'Schemas'. The 'Schemas' section is expanded, showing a tree view of the database structure: 'sys', 'tudublin' (expanded), 'Tables' (expanded), 'DEPT', 'EMP', 'SALGRADE', 'Views', 'Stored Procedures', and 'Functions'. The main area displays a SQL query in a text editor:

```
1 use tudublin;
2 SELECT ENAME, SAL FROM EMP WHERE SAL BETWEEN 1500 AND 3000;
3
```

Below the query editor, the 'Result Grid' is shown, displaying the results of the query. The grid has two columns: 'ENAME' and 'SAL'. The results are as follows:

ENAME	SAL
ALLEN	1600.00
JONES	2975.00
BLAKE	2850.00
CLARK	2450.00
SCOTT	3000.00
TURNER	1500.00
FORD	3000.00

The bottom of the interface shows a status bar with 'Query Completed' and a 'Read Only' button.

Question 10

Display the name and salary for all employees whose salary is not in the range of \$1500 and \$2850.

The screenshot shows a database management interface with a dark theme. The top bar indicates a warning: "tudublin - Warning - not supported". Below this is a navigation pane on the left with a tree view showing the database structure: "sys", "tudublin" (expanded), "Tables" (expanded), "DEPT", "EMP", "SALGRADE", "Views", "Stored Procedures", and "Functions". The main area displays a SQL query in a text editor:

```
1. use tudublin;
2. SELECT ENAME, SAL FROM EMP WHERE SAL NOT BETWEEN 1500 AND 2850;
3.
```

Below the query editor, the "Result Grid" is shown, displaying the results of the query. The grid has two columns: "ENAME" and "SAL". The results are as follows:

ENAME	SAL
SMITH	800.00
WARD	1250.00
JONES	2975.00
MARTIN	1250.00
SCOTT	3000.00
KING	5000.00
ADAMS	1100.00
JAMES	950.00
FORD	3000.00
MILLER	1300.00

The interface also includes a "Filter Rows" section with a search bar and an "Export" button. On the right side, there are icons for "Result Grid", "Form Editor", "Field Types", "Query Stats", and "Execution Plan". The bottom status bar shows "Query Completed" and "Read Only".

Question 11

Display the employee name, job, and start date of employees hired between February 20, 1981, and May 1, 1981.

The screenshot shows a database management interface with a dark theme. The top bar indicates the database is 'tudublin' with a warning 'Warning - not supported'. Below the top bar is a navigation menu with 'Administration' and 'Schemas'. The 'Schemas' section is expanded, showing a tree view of the database structure: 'sys', 'tudublin', 'Tables' (containing 'DEPT', 'EMP', 'SALGRADE'), 'Views', 'Stored Procedures', and 'Functions'. The main area displays a SQL query in a text editor:

```
1 use tudublin;
2 SELECT ENAME, JOB, HIREDATE FROM EMP WHERE HIREDATE BETWEEN '1981-02-20' AND '1981-05-01';
3
```

Below the query editor is a 'Result Grid' showing the results of the query. The grid has columns for 'ENAME', 'JOB', and 'HIREDATE'. The results are as follows:

ENAME	JOB	HIREDATE
ALLEN	SALESMAN	1981-02-20
WARD	SALESMAN	1981-02-22
JONES	MANAGER	1981-04-02
BLAKE	MANAGER	1981-05-01

At the bottom of the interface, there is a status bar that says 'Query Completed' and a 'Read Only' button.

Question 12

Display the employee name and department number of all employees in departments 10 and 30.

The screenshot shows a database management tool interface. The top bar indicates a warning: "tudublin - Warning - not supported". Below this, a navigation pane on the left shows a tree structure with "sys" and "tudublin" (containing Tables, Views, Stored Procedures, and Functions). The main area displays a SQL query:

```
1 use tudublin;
2 SELECT ENAME, DEPTNO FROM EMP WHERE DEPTNO IN (10, 30);
3
```

Below the query, a "Result Grid" shows the results of the query. The grid has two columns: "ENAME" and "DEPTNO". The results are as follows:

ENAME	DEPTNO
CLARK	10
KING	10
MILLER	10
ALLEN	30
WARD	30
MARTIN	30
BLAKE	30
TURNER	30
JAMES	30

The bottom status bar indicates "Query Completed" and "Read Only".

Question 13

Display all employees not employed as managers, clerks or salespeople.

