Practice 1

1. Initiate a SQL*Plus session using the user ID and password provided by the instructor.

2. SQL*Plus commands access the database.
   True/False

3. Will the SELECT statement execute successfully?
   True/False

```
SQL> SELECT          ename, job, sal Salary
  2     FROM         emp;
```

4. Will the SELECT statement execute successfully?
   True/False

```
SQL> SELECT          *
  2     FROM         salgrade;
```

5. There are three coding errors in this statement. Can you identify them?

```
SQL> SELECT          empno, ename ;a
  2                  salary x 12 ANNUAL SALARY
  3     FROM         emp;
```

6. Show the structure of the DEPT table. Select all data from the DEPT table.

```
Name              Null?         Type
----------------  ---------     -------------
DEPTNO            NOT NULL      NUMBER(2)
DNAME                           VARCHAR2(14)
LOC                             VARCHAR2(13)
```

```
DEPTNO    DNAME          LOC
------    ----------     ---------------
   10     ACCOUNTING     NEW YORK
   20     RESEARCH       DALLAS
   30     SALES          CHICAGO
   40     OPERATIONS     BOSTON
```

Practice 1 (continued)

7. Show the structure of the EMP table. Create a query to display the name, job, hire date and employee number for each employee, with employee number appearing first. Save your SQL statement to a file named *p1q7.sql*.

```
Name              Null?       Type
----------        --------    -------------

EMPNO             NOT NULL    NUMBER(4)
ENAME                         VARCHAR2(10)
JOB                           VARCHAR2(9)
MGR                           NUMBER(4)
HIREDATE                      DATE
SAL                           NUMBER(7,2)
COMM                          NUMBER(7,2)
DEPTNO            NOT NULL     NUMBER(2)
```

8. Run your query in the file *p1q7.sql*.

```
EMPNO ENAME     JOB            HIREDATE
----- -------   -----------    ---------

 7839 KING      PRESIDENT      17-NOV-81
 7698 BLAKE     MANAGER        01-MAY-81
 7782 CLARK     MANAGER        09-JUN-81
 7566 JONES     MANAGER        02-APR-81
 7654 MARTIN    SALESMAN       28-SEP-81
 7499 ALLEN     SALESMAN       20-FEB-81
 7844 TURNER    SALESMAN       08-SEP-81
 7900 JAMES     CLERK          03-DEC-81
 7521 WARD      SALESMAN       22-FEB-81
 7902 FORD      ANALYST        03-DEC-81
 7369 SMITH     CLERK          17-DEC-80
 7788 SCOTT     ANALYST        09-DEC-82
 7876 ADAMS     CLERK          12-JAN-83
 7934 MILLER    CLERK          23-JAN-82
14 rows selected.
```

Practice 1 (continued)

9. Create a query to display unique jobs from the EMP table.

```
JOB
-----------

ANALYST
CLERK
MANAGER
PRESIDENT
SALESMAN
```

If you have time, complete the following exercises:

10. Load *plq7.sql* into the SQL buffer. Name the column headings Emp #, Employee, Job, and Hire Date, respectively. Rerun your query.

```
Emp # Employee    Job          Hire Date
----- ----------  -----------  ----------------

 7839 KING        PRESIDENT    17-NOV-81
 7698 BLAKE       MANAGER      01-MAY-81
 7782 CLARK       MANAGER      09-JUN-81
 7566 JONES       MANAGER      02-APR-81
 7654 MARTIN      SALESMAN     28-SEP-81
 7499 ALLEN       SALESMAN     20-FEB-81
 7844 TURNER      SALESMAN     08-SEP-81
 7900 JAMES       CLERK        03-DEC-81
 7521 WARD        SALESMAN     22-FEB-81
 7902 FORD        ANALYST      03-DEC-81
 7369 SMITH       CLERK        17-DEC-80
 7788 SCOTT       ANALYST      09-DEC-82
 7876 ADAMS       CLERK        12-JAN-83
 7934 MILLER      CLERK        23-JAN-82
14 rows selected.
```

Practice 1 (continued)

11. Display the name concatenated with the job, separated by a comma and space, and name the column Employee and Title.

```
Employee and Title
---------------------------
KING, PRESIDENT
BLAKE, MANAGER
CLARK, MANAGER
JONES, MANAGER
MARTIN, SALESMAN
ALLEN, SALESMAN
TURNER, SALESMAN
JAMES, CLERK
WARD, SALESMAN
FORD, ANALYST
SMITH, CLERK
SCOTT, ANALYST
ADAMS, CLERK
MILLER, CLERK
14 rows selected.
```

If you want extra challenge, complete the following exercises:

12. Create a query to display all the data from the EMP table. Separate each column by a comma. Name the column THE_OUTPUT.

```
THE_OUTPUT
-------------------------------------------------------------------
7839,KING,PRESIDENT,,17-NOV-81,5000,,10
7698,BLAKE,MANAGER,7839,01-MAY-81,2850,,30
7782,CLARK,MANAGER,7839,09-JUN-81,2450,,10
7566,JONES,MANAGER,7839,02-APR-81,2975,,20
7654,MARTIN,SALESMAN,7698,28-SEP-81,1250,1400,30
7499,ALLEN,SALESMAN,7698,20-FEB-81,1600,300,30
7844,TURNER,SALESMAN,7698,08-SEP-81,1500,0,30
7900,JAMES,CLERK,7698,03-DEC-81,950,,30
7521,WARD,SALESMAN,7698,22-FEB-81,1250,500,30
7902,FORD,ANALYST,7566,03-DEC-81,3000,,20
7369,SMITH,CLERK,7902,17-DEC-80,800,,20
7788,SCOTT,ANALYST,7566,09-DEC-82,3000,,20
7876,ADAMS,CLERK,7788,12-JAN-83,1100,,20
7934,MILLER,CLERK,7782,23-JAN-82,1300,,10
14 rows selected.
```