SQL Assignment 1 – Answers

```sql
CREATE TABLE CLIENTS(
CLIENT_ID
NUMBER(4)
PRIMARY KEY,
CNAME
VARCHAR2(40)
NOT NULL,
ADDRESS
VARCHAR2(30),
EMAIL
VARCHAR2(30)
UNIQUE,
PHONE
NUMBER(10),
BUSINESS
VARCHAR2(20)
NOT NULL);
Insert into CLIENTS
(CLIENT_ID,CNAME,ADDRESS,EMAIL,PHONE,BUSINESS)
values (1001,'ACME
Utilities','Noida','contact@acmeutil.com',9567880032,'Man
ufacturing');
Insert into CLIENTS
(CLIENT_ID,CNAME,ADDRESS,EMAIL,PHONE,BUSINESS)
values (1002,'Trackon
Consultants','Mumbai','consult@trackon.com',8734210090,
'Consultant');
Insert into CLIENTS
(CLIENT_ID,CNAME,ADDRESS,EMAIL,PHONE,BUSINESS)
values (1003,'MoneySaver
Distributors','Bangalore','save@moneysaver.com',7799886
655,'Reseller');
Insert into CLIENTS
(CLIENT_ID,CNAME,ADDRESS,EMAIL,PHONE,BUSINESS)
values (1004,'Lawful
Corp','Chennai','justice@lawful.com',9210342219,'Professi
onal');
CREATE TABLE DEPARTMENTS(
DEPTNO
NUMBER(2)
PRIMARY KEY,
DNAME
VARCHAR2(15)
NOT NULL,
LOC
VARCHAR2(20));
Insert into DEPARTMENTS (DEPTNO,DNAME,LOC) values
(10,'Design','Pune');
Insert into DEPARTMENTS (DEPTNO,DNAME,LOC) values
(20,'Development','Pune');
Insert into DEPARTMENTS (DEPTNO,DNAME,LOC) values
(30,'Testing','Mumbai');
Insert into DEPARTMENTS (DEPTNO,DNAME,LOC) values
(40,'Document','Mumbai');
CREATE TABLE EMPLOYEES(
EMPNO
NUMBER(4)
PRIMARY KEY,
```

```sql
ENAME
VARCHAR2(20)
NOT NULL,
JOB
VARCHAR2(15),
SALARY
NUMBER(7)
CHECK (SALARY > 0),
DEPTNO
NUMBER(2)
REFERENCES
DEPARTMENTS(DEPTNO));
Insert into EMPLOYEES
(EMPNO,ENAME,JOB,SALARY,DEPTNO) values
(7001,'Sandeep','Analyst',25000,10);
Insert into EMPLOYEES
(EMPNO,ENAME,JOB,SALARY,DEPTNO) values
(7002,'Rajesh','Designer',30000,10);
Insert into EMPLOYEES
(EMPNO,ENAME,JOB,SALARY,DEPTNO) values
(7003,'Madhav','Developer',40000,20);
Insert into EMPLOYEES
(EMPNO,ENAME,JOB,SALARY,DEPTNO) values
(7004,'Manoj','Developer',40000,20);
Insert into EMPLOYEES
(EMPNO,ENAME,JOB,SALARY,DEPTNO) values
(7005,'Abhay','Designer',35000,10);
Insert into EMPLOYEES
(EMPNO,ENAME,JOB,SALARY,DEPTNO) values
(7006,'Uma','Tester',30000,30);
Insert into EMPLOYEES
(EMPNO,ENAME,JOB,SALARY,DEPTNO) values
(7007,'Gita','Tech. Writer',30000,40);
Insert into EMPLOYEES
(EMPNO,ENAME,JOB,SALARY,DEPTNO) values
(7008,'Priya','Tester',35000,30);
Insert into EMPLOYEES
(EMPNO,ENAME,JOB,SALARY,DEPTNO) values
(7009,'Nutan','Developer',45000,20);
Insert into EMPLOYEES
(EMPNO,ENAME,JOB,SALARY,DEPTNO) values
(7010,'Smita','Analyst',20000,10);
Insert into EMPLOYEES
(EMPNO,ENAME,JOB,SALARY,DEPTNO) values
(7011,'Anand','Project Mgr',65000,10);
CREATE TABLE PROJECTS(
PROJECT_ID
NUMBER(3)
PRIMARY KEY,
DESCR
VARCHAR2(30)
NOT NULL,
START_DATE
DATE,
PLANNED_END DATE
DATE,
ACTUAL_END_DATE
DATE,
BUDGET
```

```sql
NUMBER(10)
CHECK(BUDGET > 0),
CLIENT_ID
NUMBER(4)
REFERENCES
CLIENTS(CLIENT_ID));
Insert into PROJECTS
(PROJECT_ID,DESCR,START_DATE,PLANNED_END_DATE,ACT
UAL_END_DATE,BUDGET,CLIENT_ID) values
(401,'Inventory',to_date('01-APR-11','DD-MON-
RR'),to_date('01-OCT-11','DD-MON-RR'),to_date('31-OCT-
11','DD-MON-RR'),150000,1001);
Insert into PROJECTS
(PROJECT_ID,DESCR,START_DATE,PLANNED_END_DATE,ACT
UAL_END_DATE,BUDGET,CLIENT_ID) values
(402,'Accounting',to_date('01-AUG-11','DD-MON-
RR'),to_date('01-JAN-12','DD-MON-RR'),null,500000,1002);
Insert into PROJECTS
(PROJECT_ID,DESCR,START_DATE,PLANNED_END_DATE,ACT
UAL_END_DATE,BUDGET,CLIENT_ID) values
(403,'Payroll',to_date('01-OCT-11','DD-MON-
RR'),to_date('31-DEC-11','DD-MON-RR'),null,75000,1003);
Insert into PROJECTS
(PROJECT_ID,DESCR,START_DATE,PLANNED_END_DATE,ACT
UAL_END_DATE,BUDGET,CLIENT_ID) values (404,'Contact
Mgmt',to_date('01-NOV-11','DD-MON-RR'),to_date('31-DEC-
11','DD-MON-RR'),null,50000,1004);
CREATE TABLE EMPPROJECTTASKS(
PROJECT_ID
NUMBER(3) REFERENCES
PROJECTS(PROJECT_ID),
EMPNO
NUMBER(4) REFERENCES EMPLOYEES(EMPNO),
START_DATE
DATE,
END_DATE
DATE,
TASK
VARCHAR2(25)
NOT NULL,
STATUS
VARCHAR2(15)
NOT NULL,
PRIMARY KEY(PROJECT_ID,EMPNO));
Insert into EMPPROJECTTASKS
(PROJECT_ID,EMPNO,START_DATE,END_DATE,TASK,STATUS)
values (401,7001,to_date('01-APR-11','DD-MON-
RR'),to_date('20-APR-11','DD-MON-RR'),'System
Analysis','Completed');
Insert into EMPPROJECTTASKS
(PROJECT_ID,EMPNO,START_DATE,END_DATE,TASK,STATUS)
values (401,7002,to_date('21-APR-11','DD-MON-
RR'),to_date('30-MAY-11','DD-MON-RR'),'System
Design','Completed');
Insert into EMPPROJECTTASKS
(PROJECT_ID,EMPNO,START_DATE,END_DATE,TASK,STATUS)
values (401,7003,to_date('01-JUN-11','DD-MON-
RR'),to_date('15-JUL-11','DD-MON-
RR'),'Coding','Completed');
```

```sql
Insert into EMPPROJECTTASKS
(PROJECT_ID,EMPNO,START_DATE,END_DATE,TASK,STATUS)
values (401,7004,to_date('18-JUL-11','DD-MON-
RR'),to_date('01-SEP-11','DD-MON-
RR'),'Coding','Completed');
Insert into EMPPROJECTTASKS
(PROJECT_ID,EMPNO,START_DATE,END_DATE,TASK,STATUS)
values (401,7006,to_date('03-SEP-11','DD-MON-
RR'),to_date('15-SEP-11','DD-MON-
RR'),'Testing','Completed');
Insert into EMPPROJECTTASKS
(PROJECT_ID,EMPNO,START_DATE,END_DATE,TASK,STATUS)
values (401,7009,to_date('18-SEP-11','DD-MON-
RR'),to_date('05-OCT-11','DD-MON-RR'),'Code
Change','Completed');
Insert into EMPPROJECTTASKS
(PROJECT_ID,EMPNO,START_DATE,END_DATE,TASK,STATUS)
values (401,7008,to_date('06-OCT-11','DD-MON-
RR'),to_date('16-OCT-11','DD-MON-
RR'),'Testing','Completed');
Insert into EMPPROJECTTASKS
(PROJECT_ID,EMPNO,START_DATE,END_DATE,TASK,STATUS)
values (401,7007,to_date('06-OCT-11','DD-MON-
RR'),to_date('22-OCT-11','DD-MON-
RR'),'Documentation','Completed');
Insert into EMPPROJECTTASKS
(PROJECT_ID,EMPNO,START_DATE,END_DATE,TASK,STATUS)
values (401,7011,to_date('22-OCT-11','DD-MON-
RR'),to_date('31-OCT-11','DD-MON-RR'),'Sign
of','Completed');
Insert into EMPPROJECTTASKS
(PROJECT_ID,EMPNO,START_DATE,END_DATE,TASK,STATUS)
values (402,7010,to_date('01-AUG-11','DD-MON-
RR'),to_date('20-AUG-11','DD-MON-RR'),'System
Analysis','Completed');
Insert into EMPPROJECTTASKS
(PROJECT_ID,EMPNO,START_DATE,END_DATE,TASK,STATUS)
values (402,7002,to_date('22-AUG-11','DD-MON-
RR'),to_date('30-SEP-11','DD-MON-RR'),'System
Design','Completed');
Insert into EMPPROJECTTASKS
(PROJECT_ID,EMPNO,START_DATE,END_DATE,TASK,STATUS)
values (402,7004,to_date('01-OCT-11','DD-MON-
RR'),null,'Coding','In Progress');
SELECT * FROM CLIENTS;
SELECT * FROM DEPARTMENTS;
SELECT * FROM EMPLOYEES;
SELECT * FROM PROJECTS;
SELECT * FROM EMPPROJECTTASKS;
```