ASSIGNMENT SQL

CLIENT TABLE

CLIENT\_ID INT PRIMARY KEY,

CNAME VARCHAR(40) NOT NULL,

ADDRESS VARCHAR(30),

EMAIL VARCHAR(30) UNIQUE,

PHONE VARCHAR (10),

BUSINESS VARCHAR(20) NOT NULL)

INSERT INTO CLIENT (CLIENT\_ID, CNAME, ADDRESS, EMAIL, PHONE, BUSINESS)

VALUES (1001,'ACME Utilities','Noida','contact@acmeutil.com',9567880032,'Manufacturing'),

(1002,'Trackon Consultants','Mumbai','consult@trackon.com',8734210090,'Consultant'),

(1003,'Money Saver Distributors','Bangalore','save@moneysaver.com',7799886655,'Reseller'),

(1004,'Lawful Corp','Chennai','justice@lawful.com',9210342219,'Professional')

EMPLOYEES TABLE

CREATE TABLE EMPLOYEES (

EMPNO INT PRIMARY KEY,

ENAME VARCHAR(20) NOT NULL,

JOB VARCHAR(15),

SALARY INT,

DEPTNO INT)

INSERT INTO EMPLOYEES (EMPNO, ENAME, JOB, SALARY, DEPTNO)

VALUES (7001, 'Sandeep', 'Analyst', 2500, 10),

(7002, 'Rajesh', 'Designer', 3000, 10),

(7003, 'Madhav', 'Developer', 40000, 20),

(7004, 'Manoj', 'Developer', 40000, 20),

(7005, 'Abhay', 'Designer', 35000, 10),

(7006, 'Uma', 'Tester', 30000, 30),

(7007, 'Gita', 'Tech.Writer', 30000, 40),

(7008, 'Priya', 'Tester', 35000, 30),

(7009, 'Nutan', 'Developer', 45000, 20),

(7010, 'Samita', 'Analyst', 20000, 10),

(7011, 'Anand', 'Projct Mgr', 65000, 10);

DEPARTMENT TABLE

CREATE TABLE DEPARTMENTS (

DEPTNO INT PRIMARY KEY,

DNAME VARCHAR(15) NOT NULL,

LOC VARCHAR(20)

)

INSERT INTO DEPARTMENTS (DEPTNO, DNAME, LOC)

VALUES (10, 'Design', 'pune'),

(20, 'development', 'Pune'),

(30, 'Testing', 'Mumbai'),

(40, 'document', 'Mumbai')

PROJECT TABLE

CREATE TABLE PROJECT (

PROJECT\_ID INT PRIMARY KEY,

DESCR VARCHAR(30) NOT NULL,

START\_DATE DATE,

PLANNED\_END\_DATE DATE,

ACTUAL\_END\_DATE DATE,

BUDGET INT CHECK(BUDGET > 0),

CLIENT\_ID INT)

INSERT INTO PROJECT (PROJECT\_ID, DESCR, START\_DATE, PLANNED\_END\_DATE, ACTUAL\_END\_DATE,BUDGET, CLIENT\_ID)

VALUES (401, 'Inventory', '2011-04-01', '2011-10-01', '2011-10-31', 150000, 1001),

(402, 'Accounting', '2011-08-01', '2012-01-12', NULL, 500000, 1002),

(403, 'Payroll', '2011-10-01', '2011-12-31', NULL, 74000, 1003),

(404, 'Contact Mgmt', '2011-11-01', '2011-12-31', NULL, 50000, 1004)

EMPPROJECTTASK TABLE

CREATE TABLE EMPPROJECTTASKS(

PROJECT\_ID INT,

EMPNO INT,

START\_DATE DATE,

END\_DATE DATE,

TASK VARCHAR(25) NOT NULL,

STATUS VARCHAR(15) NOT NULL)

INSERT INTO EMPPROJECTTASKS (PROJECT\_ID, EMPNO, START\_DATE, END\_DATE, TASK, STATUS)

VALUES (401, 7001, '2011-04-01', '2011-04-20', 'System Analysis', 'Completed'),

(401, 7002, '2011-04-21', '2011-05-30', 'System Design', 'Completed'),

(401, 7003, '2011-06-01', '2011-07-15', 'Coding', 'Completed'),

(401, 7004, '2011-07-18', '2011-09-01', 'Coding', 'Completed'),

(401, 7006, '2011-09-03', '2011-09-15', 'Testing', 'Completed'),

(401, 7009, '2011-09-18', '2011-10-05', 'Code Change', 'Completed'),

(401, 7008, '2011-10-06', '2011-10-16', 'Testing', 'Completed'),

(401, 7007, '2011-10-06', '2011-10-22', 'Documentation', 'Completed'),

(401, 7011, '2011-10-22', '2011-10-31', 'Sign off', 'Completed'),

(402, 7010, '2011-08-01', '2011-08-20', 'System Analysis', 'Completed'),

(402, 7002, '2011-08-22', '2011-09-30', 'System Design', 'Completed'),

(402, 7004, '2011-10-01', NULL, 'Coding', 'In Progress')

ANSWERS

1. SELECT \* FROM CLIENTS WHERE BUSINESS = 'Consultant'

2. SELECT \* FROM EMPLOYEES WHERE NOT JOB = 'Developer'

3. SELECT \* FROM PROJECTS WHERE BUDGET > 100000

4. SELECT \* FROM PROJECTS WHERE ACTUAL\_END\_DATE IS NOT NULL

5. SELECT \* FROM EMPLOYEES WHERE ENAME LIKE 'M%'

6. SELECT \* FROM EMPLOYEES WHERE ENAME LIKE '%a'

7. SELECT DATEDIFF (MONTH, START\_DATE, ACTUAL\_END\_DATE) AS MONTHSTOCOMPLETE FROM PROJECT WHERE DESCR = 'Inventory'

8. SELECT \* FROM EMPPROJECTTASKS WHERE STATUS = 'In Progress'

9. SELECT \* FROM DEPARTMENTS WHERE LOC = 'Pune'

10. SELECT ENAME, SALARY FROM EMPLOYEES ORDER BY SALARY DESC

11. SELECT TASK, END\_DATE FROM EMPPROJECTTASKS ORDER BY END\_DATE

12. SELECT DISTINCT JOB FROM EMPLOYEES

13. SELECT UPPER(ENAME) FROM EMPLOYEES

14. SELECT ENAME, SALARY, SALARY \* .25 AS BONUS FROM EMPLOYEES

15. SELECT CONCAT (ENAME, 'work as', Job) as EmployeeJob FROM EMPLOYEES

16. SELECT DATENAME (WEEKDAY, START\_DATE) AS START\_DAY\_OF\_WEEK FROM PROJECT

17. SELECT EMAIL, CHARINDEX ('@', EMAIL) AS AT\_SYMBOL\_POSITION FROM CLIENT

18. SELECT LEFT (CNAME, 3) AS FIRST\_THREE\_CHARACTERS FROM CLIENT

19. SELECT FORMAT (BUDGET,'$999,999') AS FORMAT\_BUDGET FROM PROJECT

20. SELECT PLANNED\_END\_DATE, DATEADD (MONTH, 3, PLANNED\_END\_DATE) AS REVIEW\_DATE FROM PROJECT

21. SELECT COUNT (\*) FROM CLIENT

22. SELECT COUNT (\*) AS EMPNO, SUM(SALARY) AS SUMSALARY FROM EMPLOYEES

23. SELECT DEPTNO, MAX(SALARY) AS MAXSALARY FROM EMPLOYEES GROUP BY DEPTNO

24. SELECT JOB, MIN(SALARY) AS MINSALARY FROM EMPLOYEES GROUP BY JOB

25. SELECT AVG(SALARY) FROM EMPLOYEES

26. SELECT SUM(BUDGET) FROM PROJECTS

27. SELECT COUNT (\*) FROM EMPPROJECTTASKS WHERE TASK= 'Coding'

28. SELECT DEPTNO, COUNT (\*), SUM(SALARY) FROM EMPLOYEES GROUP BY DEPTNO

29. SELECT c.CNAME, p.DESCR, p.START\_DATE, p.BUDGET FROM PROJECT p INNER JOIN CLIENT c ON p.CLIENT\_ID = c.CLIENT\_ID

30. SELECT D.DNAME, E.ENAME, E.JOB FROM DEPARTMENTS D, EMPLOYEES E WHERE D.DEPTNO = E.DEPTNO

31. SELECT E.ENAME, P.DESCR FROM EMPLOYEES E, PROJECTS P,EMPPROJECTTASKS T WHERE T.PROJECT\_ID = P.PROJECT\_ID AND T.EMPNO = E.EMPNO AND T.TASK = 'System Analysis’

32. SELECT JOB, COUNT (\*) FROM EMPLOYEES GROUP BY JOB

33. SELECT EMPNO FROM EMPLOYEES EXCEPT SELECT EMPNO FROM EMPPROJECTTASKS

34. SELECT EMPNO FROM EMPLOYEES INTERSECT SELECT EMPNO FROM EMPPROJECTTASKS

35. SELECT EMPNO FROM EMPLOYEES UNION ALL SELECT EMPNO FROM EMPPROJECTTASKS;

1. SELECT DESCR, BUDGET FROM PROJECTS WHERE BUDGET = (SELECT MAX(BUDGET) FROM PROJECTS)

2. SELECT ENAME, JOB FROM EMPLOYEES WHERE JOB = (SELECT JOB FROM EMPLOYEES WHERE ENAME = 'Madhav')

3. SELECT ENAME,JOB FROM EMPLOYEES WHERE EMPNO = (SELECT EMPNO FROM EMPPROJECTTASKS WHERE PROJECT\_ID = 401 AND TASK = 'Code Change')

4. SELECT c.CNAME FROM CLIENT C INNER JOIN PROJECT P ON c.CLIENT\_ID = p.CLIENT\_ID INNER JOIN EMPPROJECTTASKS pt ON p.PROJECT\_ID = pt.PROJECT\_ID INNER JOIN EMPPROJECTTASKS t on pt.TASK =t.TASK WHERE t.TASK = 'Coding' AND pt.STATUS = 'In Progress'

5. SELECT DEPTNO, ENAME, SALARY FROM EMPLOYEES E WHERE SALARY = (SELECT MAX(SALARY) FROM EMPLOYEES WHERE DEPTNO = E.DEPTNO)

6. SELECT d.DNAME, sum(e.salary) as Totalsalary From DEPARTMENTS d INNER JOIN EMPLOYEES e ON d.DEPTNO = e.DEPTNO GROUP BY d.DNAME ORDER BY Totalsalary DESC

7. CREATE TABLE CLIENT\_PROJECT AS SELECT C.CLIENT\_ID,C.CNAME, C.ADDRESS, C.BUSINESS ,P.DESCR, P.BUDGET FROM CLIENT C,INNER JOIN PROJECT P ON C.CLIENT\_ID = P.CLIENT\_ID

8. UPDATE EMPLOYEES SET SALARY = SALARY \* 1.15 WHERE EMPNO IN (SELECT EMPNO FROM EMPPROJECTTASKS WHERE TASK = 'Testing')

9. CREATE VIEW DEPT\_EMP AS SELECT D.DEPTNO, D.DNAME, D.LOC, E.ENAME, E.JOB, E.SALARY FROM DEPARTMENTS D,EMPLOYEES E WHERE D.DEPTNO=E.DEPTNO

10. CREATE SYNONYM EPT FOR EMPPROJECTTASKS