Lab Test

ROLL: 2005535 | NAME: SAHIL SINGH | DATE: 23/02/22

QUES : Insert the values in the given tables and run the following queries.

**STUDENT**

STUDENT NO TEXT (3) PRIMARYKEY

STUDENT\_NAME TEXT (10)

STUDENT\_DOB DATE

STUDENT\_DOJ DATE

**PROJECT**

PRJ\_NO TEXT (3) PRIMARY KEY

PRJ\_NAME TEXT (15)

PRJ\_DUR NUMBER (2)

PRJ\_PLATFORM TEXT (10)

**STUDENT PROJECT**

STUDENT\_NO TEXT (3)

PRJ\_NO TEXT (3)

DESIGNATION TEXT (10)

PRIMARYKEY (STUDENT\_NO,PRJ\_NO,DESIGNATION)

FOREIGN KEY(STUDENT\_NO)

FOREIGN KEY(PRJ\_NO)

**Student Table**

ST\_NO ST\_NAME ST\_DOB ST\_DOJ

ST1 KRUNAL 15-AUG-82 10-JAN-03

ST2 BHAVESH 20-AUG-83 10-JAN-03

ST3 DARSHAN 15-MAR-83 12-FEB-03

ST4 DHAVAL 11-MAY-82 11-MAR-03

ST5 BIBIN 23-MAY-83 12-MAR-03

ST6 SAMIR 04-SEP-82 12-APR-03

ST7 CHIRAG 04-JUN-82 12-FEB-03

**Project Table**

**PRJ\_No PRJ\_NAME PRJ\_DUR PRJ\_PLATFO**

P01 XYZ 6 VB

P02 ABC 5 JAVA

P03 LMN 6 C++

**STUDENT PROJECT**

**ST\_ no PRJ DESIGNATION**

ST1 P01 PROGRAMMER

ST2 P01 MANAGER

ST3 P02 MANAGER

ST4 P02 MANAGER

ST5 P03 PROGRAMMER

ST6 P03 MANAGER

ST1 P03 PROGRAMMER

ST1 P01 ANALYST

ST3 P02 ANALYST

**QUERY**

1. Display the information(no,name,age) of student who made the project in java.

2. Display the detail of student who is a programmer

3. Display the info of the project with greater than single no of student involve in it.

4. Display detail of the youngest student.

5. Find number of student who participated in the project 'p01'

6.Display list of students who joined between 82 to 83.

7.Count the number of person assigned to Project no P03.

SOLUTION:

Table Creation:

(STUDENT TABLE)

SQL> CREATE TABLE STUDENT(

STUDENT\_NO VARCHAR(3) PRIMARY KEY,

STUDENT\_NAME VARCHAR(10),

STUDENT\_DOB DATE,

STUDENT\_DOJ DATE

);

(PROJECT TABLE)

SQL> CREATE TABLE PROJECT(

PRJ\_NO VARCHAR(3) PRIMARY KEY,

PRJ\_NAME VARCHAR(15),

PRJ\_DUR NUMBER(2),

PRJ\_PLATFORM VARCHAR(10)

);

(STUDENT\_PROJECT TABLE)

SQL> CREATE TABLE STUDENT\_PROJECT (

STUDENT\_NO VARCHAR(3),

PRJ\_NO VARCHAR(3),

DESIGNATION VARCHAR(10),

PRIMARY KEY (STUDENT\_NO,PRJ\_NO,DESIGNATION),

FOREIGN KEY(STUDENT\_NO) REFERENCES STUDENT(STUDENT\_NO),

FOREIGN KEY(PRJ\_NO) REFERENCES PROJECT(PRJ\_NO)

);

Data Insertion:

(STUDENT TABLE)

INSERT INTO STUDENT VALUES ('ST1', 'KRUNAL', '15-AUG-1982','10-JAN-2003');

INSERT INTO STUDENT VALUES ('ST2', 'BHAVESH', '20-AUG-1983', '10-JAN-2003');

INSERT INTO STUDENT VALUES ('ST3', 'DARSHAN', '15-MAR-1983', '12-FEB-2003');

INSERT INTO STUDENT VALUES ('ST4', 'DHAVAL', '11-MAY-1982', '11-MAR-2003');

INSERT INTO STUDENT VALUES ('ST5', 'BIBIN', '23-MAY-1983', '12-MAR-2003');

INSERT INTO STUDENT VALUES ('ST6', 'SAMIR', '04-SEP-1982', '12-APR-2003');

INSERT INTO STUDENT VALUES ('ST7', 'CHIRAG', '04-JUN-1982', '12-FEB-2003');

(PROJECT TABLE)

INSERT INTO PROJECT VALUES ('P01', 'XYZ', 6,'VB');

INSERT INTO PROJECT VALUES ('P02', 'ABC', 5,'JAVA');

INSERT INTO PROJECT VALUES ('P03', 'LMN', 6, 'C++');

SELECT \* FROM PROJECT;

(STUDENT\_PROJECT)

INSERT INTO STUDENT\_PROJECT VALUES ('ST1','P01','PROGRAMMER');

INSERT INTO STUDENT\_PROJECT VALUES ('ST2','P01','MANAGER');

INSERT INTO STUDENT\_PROJECT VALUES ('ST3','P02','MANAGER');

INSERT INTO STUDENT\_PROJECT VALUES ('ST4','P02','MANAGER');

INSERT INTO STUDENT\_PROJECT VALUES ('ST5','P03','PROGRAMMER');

INSERT INTO STUDENT\_PROJECT VALUES ('ST6','P03','MANAGER');

INSERT INTO STUDENT\_PROJECT VALUES ('ST1','P03','PROGRAMMER');

INSERT INTO STUDENT\_PROJECT VALUES ('ST1','P01','ANALYST');

INSERT INTO STUDENT\_PROJECT VALUES ('ST3','P02','ANALYST');

QUERIES

SELECT STUDENT\_NO,STUDENT\_NAME,ROUND((SYSDATE-STUDENT\_DOB)/365) FROM STUDENT WHERE STUDENT\_NO

IN(SELECT STUDENT\_NO FROM STUDENT\_PROJECT WHERE PRJ\_NO IN

(SELECT PRJ\_NO FROM PROJECT WHERE PRJ\_PLATFORM='JAVA'));

SELECT \* FROM STUDENT WHERE STUDENT\_NO IN

(SELECT STUDENT\_NO FROM STUDENT\_PROJECT WHERE DESIGNATION = 'PROGRAMMER');

SELECT PRJ\_NO FROM STUDENT\_PROJECT

GROUP BY PRJ\_NO HAVING COUNT(STUDENT\_NO)>1;

SELECT \* FROM STUDENT

WHERE STUDENT\_DOB = (SELECT MAX(STUDENT\_DOB) FROM STUDENT);

SELECT COUNT(STUDENT\_NO) FROM STUDENT\_PROJECT

WHERE STUDENT\_PROJECT.PRJ\_NO = 'P01';

SELECT \* FROM STUDENT

WHERE EXTRACT(YEAR FROM STUDENT\_DOJ) BETWEEN 2002 AND 2003;

SELECT COUNT(PRJ\_NO) FROM STUDENT\_PROJECT

WHERE STUDENT\_PROJECT.PRJ\_NO = 'P03';

SELECT PRJ\_NO, COUNT(DISTINCT STUDENT\_NO) AS TOTALNUMBEROFSTUDENTS FROM STUDENT\_PROJECT

GROUP BY PRJ\_NO;

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