

Lab Test

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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;
```
