ASSIGNMENT 8.

NAME = AMAN MUNIR MUJAWAR

SIB-16 IT-B

PROBLEM STATEMENT

/\*

Write and execute PL/SQL stored procedure and function to perform a suitable task on the database. Demonstrate its use.

\*/

mysql> CREATE DATABASE PL\_SQL;

Query OK, 1 row affected (0.01 sec)

mysql> USE PL\_SQL;

Database changed

mysql> CREATE TABLE STUDENT(

-> STUDENT\_ID INT NOT NULL,

-> STUDENT\_NAME VARCHAR(100) NOT NULL,

-> STUDENT\_AGE INT DEFAULT 28,

-> PRIMARY KEY (STUDENT\_ID)

-> );

Query OK, 0 rows affected (0.04 sec)

mysql> INSERT INTO STUDENT (STUDENT\_ID,STUDENT\_NAME,STUDENT\_AGE)

-> VALUES

-> (101,'MANOJ KEDAR',20),

-> (102,'VIRAT KOHLI',20),

-> (103,'RAM SHUKLA',21),

-> (104,'RAJU RASTOGI',19),

-> (105,'JAMES HOLAND',20);

Query OK, 5 rows affected (0.01 sec)

Records: 5 Duplicates: 0 Warnings: 0

-- ============================================= GET\_ALL\_STUDENTS\_DATA() =================================================

mysql> DELIMITER $$

mysql> CREATE PROCEDURE get\_student()

-> BEGIN

-> SELECT \* FROM STUDENT;

-> END $$

Query OK, 0 rows affected (0.01 sec)

mysql> DELIMITER ;

mysql> CALL GET\_STUDENT();

+------------+--------------+-------------+

| STUDENT\_ID | STUDENT\_NAME | STUDENT\_AGE |

+------------+--------------+-------------+

| 101 | MANOJ KEDAR | 20 |

| 102 | VIRAT KOHLI | 20 |

| 103 | RAM SHUKLA | 21 |

| 104 | RAJU RASTOGI | 19 |

| 105 | JAMES HOLAND | 20 |

+------------+--------------+-------------+

5 rows in set (0.00 sec)

Query OK, 0 rows affected (0.02 sec)

mysql> ALTER TABLE STUDENT

-> ADD COLUMN PERSENTAGE DECIMAL(10,2);

Query OK, 0 rows affected (0.03 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> UPDATE STUDENT

-> SET PERSENTAGE = 60

-> WHERE STUDENT\_ID = 101;

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> UPDATE STUDENT

-> SET PERSENTAGE = 70

-> WHERE STUDENT\_ID = 102;

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> UPDATE STUDENT

-> SET PERSENTAGE = 50

-> WHERE STUDENT\_ID = 103;

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> UPDATE STUDENT

-> SET PERSENTAGE = 65

-> WHERE STUDENT\_ID = 104;

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> UPDATE STUDENT

-> SET PERSENTAGE = 60

-> WHERE STUDENT\_ID = 105;

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

-- ==================================== 1.GET\_MAX\_PERSENT() =======================================================

mysql> DELIMITER $$

mysql> CREATE PROCEDURE GET\_MAX\_PERSENT()

-> BEGIN

-> SELECT MAX(PERSENTAGE) AS PERSENTAGE FROM STUDENT;

-> END $$

Query OK, 0 rows affected (0.01 sec)

mysql> DELIMITER ;

mysql>

mysql> CALL GET\_MAX\_PERSENT();

+------------+

| PERSENTAGE |

+------------+

| 70.00 |

+------------+

1 row in set (0.00 sec)

Query OK, 0 rows affected (0.01 sec)

-- ========================================== 2.GET\_MIN\_PERENT() =====================================================

mysql> DELIMITER $$

mysql> CREATE PROCEDURE GET\_MIN\_PERSENT()

-> BEGIN

-> SELECT MIN(PERSENTAGE) AS PERSENTAGE FROM STUDENT;

-> END $$

Query OK, 0 rows affected (0.01 sec)

mysql> DELIMITER ;

mysql>

mysql> CALL GET\_MIN\_PERSENT();

+------------+

| PERSENTAGE |

+------------+

| 50.00 |

+------------+

1 row in set (0.00 sec)

Query OK, 0 rows affected (0.04 sec)

-- ============================== 3.GET\_AVG\_PERSENT() ==================================================================

mysql> DELIMITER //

mysql> CREATE PROCEDURE GET\_AVERAGE\_PERSENT()

-> BEGIN

-> SELECT AVG(PERSENTAGE) AS PERSENTAGE FROM STUDENT;

-> END //

Query OK, 0 rows affected (0.02 sec)

mysql> DELIMITER ;

mysql> CALL GET\_AVERAGE\_PERSENT();

+------------+

| PERSENTAGE |

+------------+

| 61.000000 |

+------------+

1 row in set (0.00 sec)

Query OK, 0 rows affected (0.01 sec)

-- ==================================== 4.FIND\_STUDENT() ============================================================

mysql> DELIMITER &&

mysql> CREATE PROCEDURE FIND\_STUDENT(IN ID INT) //PASS ARGUMENT AS ID.

-> BEGIN

-> SELECT \* FROM STUDENT

-> WHERE STUDENT\_ID = ID;

-> END &&

Query OK, 0 rows affected (0.01 sec)

mysql> DELIMITER ;

mysql> CALL FIND\_STUDENT(101);

+------------+--------------+-------------+------------+

| STUDENT\_ID | STUDENT\_NAME | STUDENT\_AGE | PERSENTAGE |

+------------+--------------+-------------+------------+

| 101 | MANOJ KEDAR | 20 | 60.00 |

+------------+--------------+-------------+------------+

1 row in set (0.00 sec)

Query OK, 0 rows affected (0.05 sec)

-- ======================================== 5.DELETE\_STUDENT() =========================================================

mysql> DELIMITER &&

mysql> CREATE PROCEDURE DELETE\_STUDENT(IN ID INT)

-> BEGIN

-> DELETE FROM STUDENT

-> WHERE STUDENT\_ID = ID;

-> END &&

Query OK, 0 rows affected (0.01 sec)

mysql> DELIMITER ;

mysql>

mysql> CALL DELETE\_STUDENT(101);

Query OK, 1 row affected (0.01 sec)

mysql> CALL GET\_STUDENT();

+------------+--------------+-------------+------------+

| STUDENT\_ID | STUDENT\_NAME | STUDENT\_AGE | PERSENTAGE |

+------------+--------------+-------------+------------+

| 102 | VIRAT KOHLI | 20 | 70.00 |

| 103 | RAM SHUKLA | 21 | 50.00 |

| 104 | RAJU RASTOGI | 19 | 65.00 |

| 105 | JAMES HOLAND | 20 | 60.00 |

+------------+--------------+-------------+------------+

4 rows in set (0.00 sec)

Query OK, 0 rows affected (0.04 sec)

mysql> DESC STUDENT;

+--------------+---------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+--------------+---------------+------+-----+---------+-------+

| STUDENT\_ID | int | NO | PRI | NULL | |

| STUDENT\_NAME | varchar(100) | NO | | NULL | |

| STUDENT\_AGE | int | YES | | 28 | |

| PERSENTAGE | decimal(10,2) | YES | | NULL | |

+--------------+---------------+------+-----+---------+-------+

4 rows in set (0.01 sec)

-- ============================================== INSERT\_STUDENT() =====================================================

mysql> DELIMITER &&

mysql> CREATE PROCEDURE INSERT\_STUDENT(IN ID INT,NAME VARCHAR(80),AGE INT,PERSENTAGE DECIMAL(10,2))

-> BEGIN

-> INSERT INTO student(STUDENT\_ID,STUDENT\_NAME,STUDENT\_AGE,PERSENTAGE)

-> VALUES(ID,NAME,AGE,PERSENTAGE);

-> END &&

Query OK, 0 rows affected (0.01 sec)

mysql> DELIMITER ;

mysql> CALL INSERT\_STUDENT(101,'AMAN MUJAWAR',20,80.6);

Query OK, 1 row affected (0.01 sec)

mysql> CALL GET\_STUDENT();

+------------+--------------+-------------+------------+

| STUDENT\_ID | STUDENT\_NAME | STUDENT\_AGE | PERSENTAGE |

+------------+--------------+-------------+------------+

| 101 | AMAN MUJAWAR | 20 | 80.60 |

| 102 | VIRAT KOHLI | 20 | 70.00 |

| 103 | RAM SHUKLA | 21 | 50.00 |

| 104 | RAJU RASTOGI | 19 | 65.00 |

| 105 | JAMES HOLAND | 20 | 60.00 |

+------------+--------------+-------------+------------+

5 rows in set (0.00 sec)

Query OK, 0 rows affected (0.09 sec)

/\*

NOW,

WE WILL USE ALL THIS CREATED PROCEDURES.

\*/

mysql> CALL INSERT\_STUDENT(106,'SALMAN JAMADAR',19,89);

Query OK, 1 row affected (0.01 sec)

mysql> CALL INSERT\_STUDENT(107,'SUSHANT SUTAR',20,90);

Query OK, 1 row affected (0.01 sec)

mysql> CALL INSERT\_STUDENT(108,'TANVEER BHALDAR',20,80);

Query OK, 1 row affected (0.01 sec)

mysql> CALL GET\_STUDENT();

+------------+-----------------+-------------+------------+

| STUDENT\_ID | STUDENT\_NAME | STUDENT\_AGE | PERSENTAGE |

+------------+-----------------+-------------+------------+

| 101 | AMAN MUJAWAR | 20 | 80.60 |

| 102 | VIRAT KOHLI | 20 | 70.00 |

| 103 | RAM SHUKLA | 21 | 50.00 |

| 104 | RAJU RASTOGI | 19 | 65.00 |

| 105 | JAMES HOLAND | 20 | 60.00 |

| new 106 | SALMAN JAMADAR | 19 | 89.00 |

| new 107 | SUSHANT SUTAR | 20 | 90.00 |

| new 108 | TANVEER BHALDAR | 20 | 80.00 |

+------------+-----------------+-------------+------------+

8 rows in set (0.00 sec)

Query OK, 0 rows affected (0.05 sec)

mysql> CALL FIND\_STUDENT(108);

+------------+-----------------+-------------+------------+

| STUDENT\_ID | STUDENT\_NAME | STUDENT\_AGE | PERSENTAGE |

+------------+-----------------+-------------+------------+

| 108 | TANVEER BHALDAR | 20 | 80.00 |

+------------+-----------------+-------------+------------+

1 row in set (0.00 sec)

Query OK, 0 rows affected (0.02 sec)