**EXPERIMENT 2**

**Aim:** To perform the primary and foreign key in the table and perform various Joints.

**Software Used:** MySQL

**Theory:**

**Primary Key:**

The PRIMARY KEY constraint uniquely identifies each record in a table. Primary keys must contain UNIQUE values and cannot contain NULL values. A table can have only ONE primary key; and in the table, this primary key can consist of single or multiple columns (fields).

**Foreign Key:**

A FOREIGN KEY is a field (or collection of fields) in one table, that refers to the PRIMARY KEY in another table. The table with the foreign key is called the child table, and the table with the primary key is called the referenced or parent table.

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**Joints**

**A. INNER JOIN**

The INNER JOIN keyword selects all rows from both the tables as long as the condition is satisfied. This keyword will create the result-set by combining all rows from both the tables where the condition satisfies i.e value of the common field will be the same.

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### ****B. LEFT JOIN****

This join returns all the rows of the table on the left side of the join and matches rows for the table on the right side of the join. For the rows for which there is no matching row on the right side, the result-set will contain *null*. LEFT JOIN is also known as LEFT OUTER JOIN.

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### ****C. RIGHT JOIN****

RIGHT JOIN is similar to LEFT JOIN. This join returns all the rows of the table on the right side of the join and matching rows for the table on the left side of the join. For the rows for which there is no matching row on the left side, the result-set will contain *null*. RIGHT JOIN is also known as RIGHT OUTER JOIN.

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### ****D. FULL JOIN****

FULL JOIN creates the result-set by combining results of both LEFT JOIN and RIGHT JOIN. The result-set will contain all the rows from both tables. For the rows for which there is no matching, the result-set will contain *NULL* values.

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**Conclusion**: Performed the primary and foreign key in the table and perform various Joints.