Experiment- 1.2

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1. **Aim:**
   To design and implement a relational database for storing information about ninja villages, departments, and their associated jutsus, and to retrieve analytical insights using SQL aggregation and filtering.

2. **Objective:**
   Entity Relationship Implementation – Establish connections between villages, departments, and jutsus to accurately model real-world associations.
   Data Population – Insert relevant sample data representing different ninja villages, departments, and jutsus.
   Data Analysis Query – Use SQL joins, grouping, and the HAVING clause to identify villages with more than two recorded jutsus.
   Information Presentation – Present query results in a simplified and readable manner for analysis and reporting.

3. **DBMS script and output:**
   USE githubUpload;

```
CREATE TABLE VILLAGES (
  VILLAGE_ID INT PRIMARY KEY,
  VILLAGE_NAME VARCHAR(50)
);

CREATE TABLE DEPARTMENTS (
  DEPARTMENT_ID INT PRIMARY KEY,
  DEPARTMENT_NAME VARCHAR(50)
);

CREATE TABLE JUTSUS (
  JUTSU_ID INT PRIMARY KEY,
```

```sql
    JUTSU_NAME VARCHAR(50),
    VILLAGE_ID INT,
    DEPARTMENT_ID INT,
    FOREIGN KEY (VILLAGE_ID) REFERENCES VILLAGES(VILLAGE_ID),
    FOREIGN      KEY      (DEPARTMENT_ID)      REFERENCES
DEPARTMENTS(DEPARTMENT_ID)
);

INSERT INTO VILLAGES (VILLAGE_ID, VILLAGE_NAME) VALUES
(1, 'KONOHA'),
(2, 'SUNAGAKURE'),
(3, 'KIRIGAKURE'),
(4, 'KUMOGAKURE'),
(5, 'IWAGAKURE');

INSERT      INTO      DEPARTMENTS      (DEPARTMENT_ID,
DEPARTMENT_NAME) VALUES
(1, 'NINJUTSU'),
(2, 'TAIJUTSU'),
(3, 'GENJUTSU'),
(4, 'MEDICAL'),
(5, 'DOUJUTSU'),
(6, 'SPACE-TIME');

INSERT   INTO   JUTSUS   (JUTSU_ID,   JUTSU_NAME,   VILLAGE_ID,
DEPARTMENT_ID) VALUES
(101, 'SHADOW CLONE JUTSU', 1, 1),
(102, 'RASENGAN', 1, 1),
(103, 'CHIDORI', 1, 1),
(104, 'FIRE STYLE: FIREBALL JUTSU', 1, 1),
(105, 'FLYING RAIJIN', 1, 6),
(106, 'RASENSHURIKEN', 1, 1),
(107, 'WOOD STYLE', 1, 1),
(108, '100 HEALINGS', 1, 4),
(201, 'SAND COFFIN', 2, 1),
(203, 'SAND ARMOR', 2, 1),
(301, 'WATER CLONE JUTSU', 3, 1),
(401, 'LIGHTNING BEAST JUTSU', 4, 1),
(402, 'RAIKIRI', 4, 1),
(403, 'KIRIN', 4, 1),
(503, 'SUSANOO', 5, 5);
```

```
SELECT V.VILLAGE_NAME
FROM VILLAGES V
JOIN JUTSUS J ON V.VILLAGE_ID = J.VILLAGE_ID
GROUP BY V.VILLAGE_NAME
HAVING COUNT(J.JUTSU_ID) > 2;
```

	VILLAGE_NAME
1	KONOHA
2	KUMOGAKURE