**REPORT**

**Step 1 :**

CREATE TABLE groups (

ID INT AUTO\_INCREMENT PRIMARY KEY,

group\_name VARCHAR(50) NOT NULL);A screenshot of a computer

Description automatically generated

**step 2 :**

INSERT INTO groups (group\_name)

SELECT DISTINCT `group` FROM student;A computer screen with a white screen

Description automatically generated

Step 3 :

ALTER TABLE student

ADD COLUMN groups\_ID INT;A computer screen with a white screen

Description automatically generated

Step 4 :

UPDATE student

INNER JOIN groups ON student.`group` = groups.group\_name

SET student.groups\_ID = groups.ID;A computer screen with a white screen

Description automatically generated

Step 5 :

ALTER TABLE student

DROP COLUMN `group`;A screenshot of a computer

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Description automatically generated

Step 6 :

ALTER TABLE student

ADD CONSTRAINT fk\_groups

FOREIGN KEY (groups\_ID) REFERENCES groups(ID);A computer screen with a white screen

Description automatically generatedstep 7 :

CREATE TABLE cities (

ID INT AUTO\_INCREMENT PRIMARY KEY,

city\_name VARCHAR(50) NOT NULL

);

CREATE TABLE statuses (

ID INT AUTO\_INCREMENT PRIMARY KEY,

status\_name VARCHAR(50) NOT NULL

);A screenshot of a computer

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Step 8 :

INSERT INTO cities (city\_name)

SELECT DISTINCT city FROM student;

INSERT INTO statuses (status\_name)

SELECT DISTINCT status FROM student;A screenshot of a computer

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Step 9 :

ALTER TABLE student

ADD COLUMN city\_ID INT,

ADD COLUMN status\_ID INT;A computer screen with a white screen

Description automatically generated

step 10 :

UPDATE student

INNER JOIN cities ON student.city = cities.city\_name

SET student.city\_ID = cities.ID;

UPDATE student

INNER JOIN statuses ON student.status = statuses.status\_name

SET student.status\_ID = statuses.ID;A screenshot of a computer

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Step 11 :

ALTER TABLE student

DROP COLUMN city,

DROP COLUMN status;A screenshot of a computer

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Step 12 :

ALTER TABLE student

ADD CONSTRAINT fk\_cities

FOREIGN KEY (city\_ID) REFERENCES cities(ID);

ALTER TABLE student

ADD CONSTRAINT fk\_statuses

FOREIGN KEY (status\_ID) REFERENCES statuses(ID);A screenshot of a computer

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And this is how the new database looks.A screenshot of a computer

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