Group 2-2 Energy Demand - Va tables views and queries

```
CREATE TABLE BUILDING (
        name text unique,
        bID char(7) PRIMARY KEY,
        Year_built char(4),
        Prim_use text,
        Eff_factor decimal(20,20),
        Size integer
);

CREATE TABLE METER(
        mID char(8) PRIMARY KEY,
        mName varchar(4) UNIQUE,
        etype text,
        utype  text


);

CREATE TABLE WEATHER(
        Month varchar(9) PRIMARY KEY,
        Avg_temp decimal(3,2)
);
CREATE  TABLE METER_ENTRY(
        meconsumpID char(10) PRIMARY KEY,
        Start_date text,
        End_date text,
        Usage decimal(10,2),
        Cost decimal(10,2),
        mName varchar(4),
        FOREIGN KEY (mName) REFERENCES meter (mName)
);
 CREATE TABLE belongs_to(
        buildingID char(7),
        meterID char(8),
        PRIMARY KEY(buildingID, meterID)
        FOREIGN KEY (buildingID) REFERENCES building (bID)
        FORIEGN KEY (meterID) REFERENCES meter (mID)
);
```

QUERIES:
QUERY #1:
SELECT SUM(Usage) FROM METER_ENTRY
WHERE EXTRACT(MONTH FROM Start_date) = 3;
sums the usage of all meters in march

QUERY #2:
CREATE VIEW Result AS SELECT eff_factor FROM Building WHERE name = 'Cromwell Hall';
CREATE VIEW Prod as SELECT sum(Usage) FROM meter_entry WHERE start_date LIKE '3%';
CREATE VIEW Total as SELECT * FROM Prod, Result;
SELECT sum * eff_Factor FROM Total;

QUERY #3:
CREATE VIEW TEMP AS SELECT SUM(Usage) FROM METER_ENTRY
WHERE EXTRACT(MONTH FROM Start_date) >= 3
AND EXTRACT(MONTH FROM End_date) <= 6;

CREATE VIEW Result AS SELECT eff_factor FROM Building WHERE name = 'Cromwell Hall';

CREATE VIEW DEMAND AS SELECT * FROM temp, result;

create view answer AS SELECT sum * eff_Factor as ans FROM demand;

CREATE VIEW SPRINGWEATHER AS SELECT AVG(avg_temp) FROM WEATHER
WHERE month >= 3
AND month <= 6;

select * from answer, springweather;

Gives building usage in spring and corresponding average temperature

QUERY #4:
Select * from building;
Gives all the basic facts of the building