```
CREATE VIEW Goat AS
        SELECT animal_id AS goat_id, sex, overall_adg, dob
        FROM Animal;

CREATE VIEW Picklist AS
        SELECT picklistvalue_id, value
        FROM PicklistValue;

CREATE VIEW Trait AS
        SELECT animal_id, trait_code, value
        FROM SessionAnimalActivity;
```

Queries:

```
ACCEPT inputYear1, inputYear 2
SELECT birth_year, birth_weight
FROM Goat
WHERE inputYear1=birth_year OR inputYear2=birth_year
ORDER BY birth_year;
```

Average / Mean : SELECT avg(column) AS column_avg. FROM table;

Median: SELECT. percentile_cont(.5) WITHIN GROUP (ORDER BY column) FROM table_name;

```
SELECT value, overall_adg
FROM Trait JOIN Goat ON goat_id=animal_id
WHERE trait_code=(
        SELECT picklistvalue_id FROM picklist value WHERE value= ”vigor score”;
) OR trait_code=(
        SELECT picklistvalue_id FROM picklist value WHERE value= “Dead”;
)
```

Our database will be created from three views: Goat, Picklist, and Trait. Goat has four attributes: goat_id, sex, overall_adg, and dob. The picklist view has two attributes: picklistvalue_id, and value. These values identify the traits that are used in the Trait view. For example, the picklistvalue_id value 230 identifies the vigor score for each goat. The Trait view has 3 attributes: animal_id, trait_code, and value.

The first set of queries we wrote accept input for two birth years in the database. The queries then get the birth_year and birth_weight from these years. We calculate the average and median birth weight from this data. The second set of queries gets the average daily weight gain and the vigor score for all goats so that we can compare the two statistics.