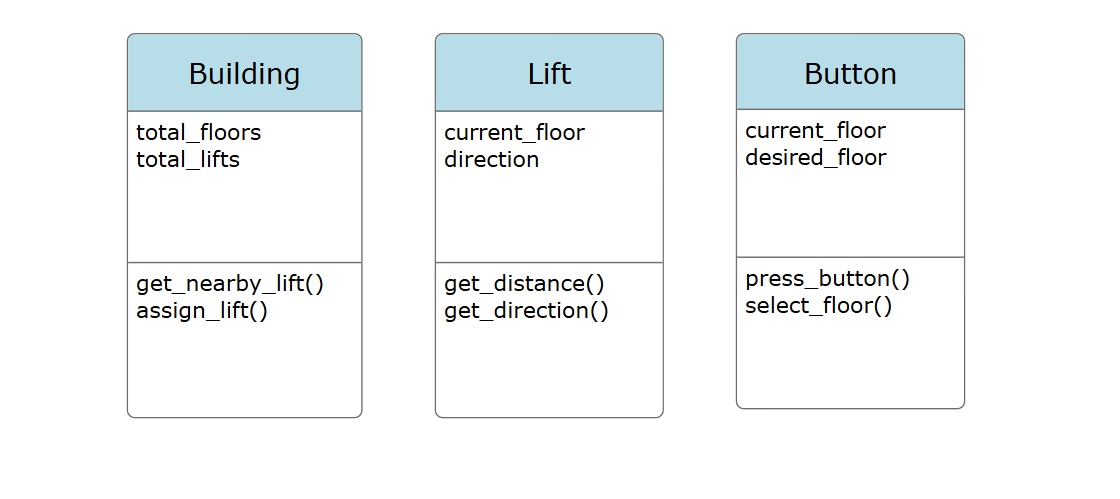
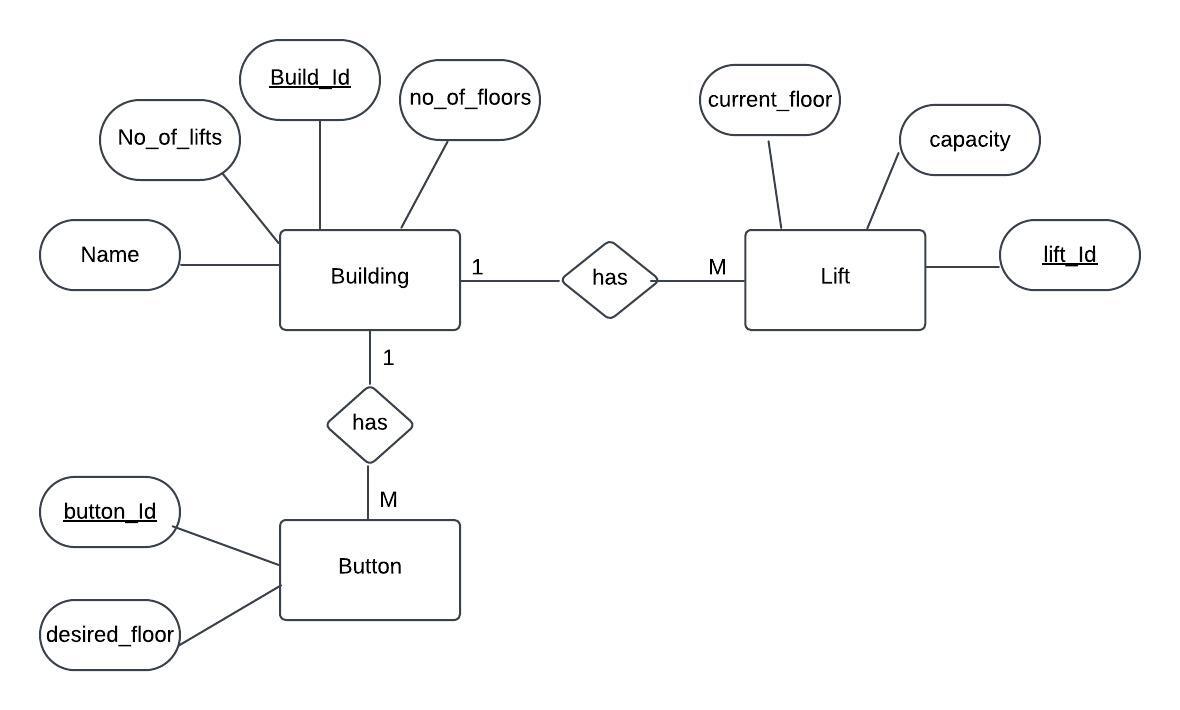
**Assignment: Creating Database for Lift Management System**

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**Submitted By: Akanksha Anil Jadhav**

Class diagram

ERD

Database : Postgres

Total tables : 3 (building , lift, button)

1. **Building table :**

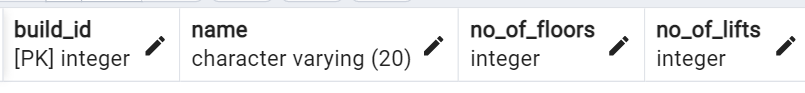
CREATE TABLE building(

build\_id integer primary key NOT NULL,

name varchar(20),

no\_of\_floors integer NOT NULL,

no\_of\_lifts integer);



Inserting values –

insert into building(build\_id,name,no\_of\_floors,no\_of\_lifts) values(1,'Building1',10,5);

values(2,'Building2',9,4);

values(3,'Building3',8,3);

values(4,'Building4',7,2);

values(5,'Building5',6,1);

1. **Lift table :**

CREATE TABLE lift(

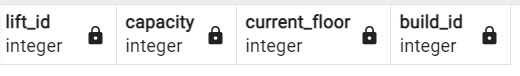
lift\_id integer NOT NULL,

capacity integer NOT NULL,

current\_floor integer,

build\_id integer,

FOREIGN KEY (build\_id) REFERENCES building (build\_id) ON DELETE CASCADE);



Inserting values –

insert into lift(lift\_id,capacity,current\_floor,build\_id) values(201,3,4,1);

values(202,5,2,4);

values(203,7,1,5);

values(204,9,6,1);

values(205,11,7,2);

1. **Button table :**

CREATE TABLE button(

btn\_id integer NOT NULL,

desired\_floor integer,

build\_id integer,

FOREIGN KEY (build\_id) REFERENCES building (build\_id) ON DELETE CASCADE);



Inserting values –

insert into button(btn\_id,desired\_floor,build\_id) values(301,1,1);

values(301,2,4);

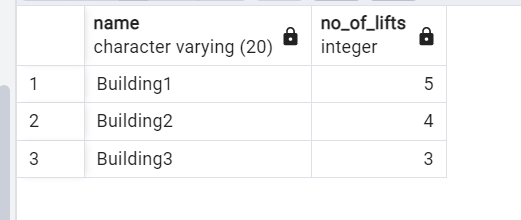
values(301,3,5);

values(301,4,1);

values(301,5,2);

# Query 1:

SELECT name, no\_of\_lifts FROM building ORDER BY no\_of\_lifts DESC LIMIT 3;

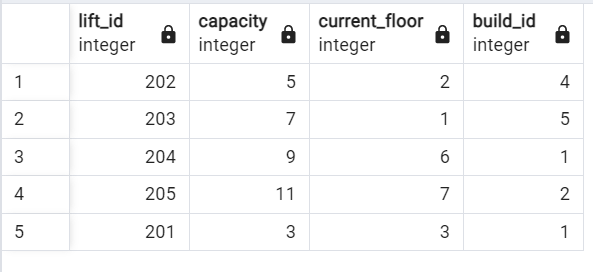


# Query 2-

UPDATE lift

SET current\_floor = 3

WHERE lift\_id = 201;

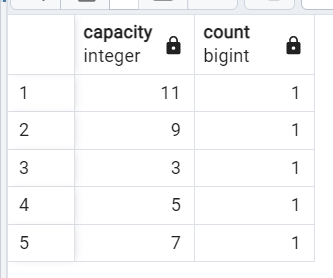
select \* from lift;

# Query 3-

SELECT capacity, COUNT(lift\_id)

FROM lift

GROUP BY capacity



# Query 4:

SELECT \*

FROM lift

WHERE build\_id IN (

SELECT build\_id

FROM building

WHERE no\_of\_lifts > 2

);

