

Table Generation

-- MySQL Workbench Forward Engineering

SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0;

SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS=0;

SET @OLD_SQL_MODE=@@SQL_MODE,

SQL_MODE='ONLY_FULL_GROUP_BY,STRICT_TRANS_TABLES,NO_ZERO_IN_DATE,NO_ZERO_DATE,ERROR_FOR_DIVISION_BY_ZERO,NO_ENGINE_SUBSTITUTION';

-- Schema selectqueryhandson

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CREATE SCHEMA IF NOT EXISTS `selectqueryhandson` DEFAULT CHARACTER SET utf8 ;

USE `selectqueryhandson` ;

-- Table `selectqueryhandson`.`electricity_connection_type`

CREATE TABLE IF NOT EXISTS `selectqueryhandson`.`electricity_connection_type` (

`id` INT NOT NULL,

`connection_name` VARCHAR(20) NOT NULL,

PRIMARY KEY (`id`))

ENGINE = InnoDB;

```
-- Table `selectqueryhandson`.`slab`
```

```
CREATE TABLE IF NOT EXISTS `selectqueryhandson`.`slab` (  
  `id` INT NOT NULL,  
  `from_unit` INT(11) NOT NULL,  
  `to_unit` INT(11) NOT NULL,  
  `rate` INT(11) NOT NULL,  
  `electricity_connection_type_id` INT NOT NULL,  
  PRIMARY KEY (`id`),  
  INDEX `fk_slab_electricity_connection_type_idx` (`electricity_connection_type_id` ASC) VISIBLE,  
  CONSTRAINT `fk_slab_electricity_connection_type`  
    FOREIGN KEY (`electricity_connection_type_id`)  
    REFERENCES `selectqueryhandson`.`electricity_connection_type` (`id`)  
    ON DELETE NO ACTION  
    ON UPDATE NO ACTION)  
ENGINE = InnoDB;
```

```
-- Table `selectqueryhandson`.`building_type`
```

```
CREATE TABLE IF NOT EXISTS `selectqueryhandson`.`building_type` (  
  `id` INT NOT NULL,  
  `name` VARCHAR(100) NOT NULL,  
  `electricity_connection_type_id` INT NOT NULL,  
  PRIMARY KEY (`id`),
```

```
INDEX `fk_building_type_electricity_connection_type1_idx` (`electricity_connection_type_id` ASC)
VISIBLE,
```

```
CONSTRAINT `fk_building_type_electricity_connection_type1`
FOREIGN KEY (`electricity_connection_type_id`)
REFERENCES `selectqueryhandson`.`electricity_connection_type` (`id`)
ON DELETE NO ACTION
ON UPDATE NO ACTION)
```

```
ENGINE = InnoDB;
```

```
-- Table `selectqueryhandson`.`building`
```

```
CREATE TABLE IF NOT EXISTS `selectqueryhandson`.`building` (
  `id` INT NOT NULL,
  `owner_name` VARCHAR(100) NOT NULL,
  `address` VARCHAR(100) NOT NULL,
  `contact_number` VARCHAR(100) NOT NULL,
  `email` VARCHAR(100) NULL,
  `building_type_id` INT NOT NULL,
  PRIMARY KEY (`id`),
  INDEX `fk_building_building_type1_idx` (`building_type_id` ASC) VISIBLE,
  CONSTRAINT `fk_building_building_type1`
    FOREIGN KEY (`building_type_id`)
    REFERENCES `selectqueryhandson`.`building_type` (`id`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;
```

```
-- Table `selectqueryhandson`.`meter`
```

```
CREATE TABLE IF NOT EXISTS `selectqueryhandson`.`meter` (  
  `id` INT NOT NULL,  
  `meter_number` VARCHAR(100) NOT NULL,  
  `building_id` INT NOT NULL,  
  PRIMARY KEY (`id`),  
  INDEX `fk_meter_building1_idx` (`building_id` ASC) VISIBLE,  
  CONSTRAINT `fk_meter_building1`  
    FOREIGN KEY (`building_id`)  
    REFERENCES `selectqueryhandson`.`building` (`id`)  
    ON DELETE NO ACTION  
    ON UPDATE NO ACTION)  
ENGINE = InnoDB;
```

```
-- Table `selectqueryhandson`.`bill`
```

```
CREATE TABLE IF NOT EXISTS `selectqueryhandson`.`bill` (  
  `id` INT NOT NULL,  
  `month` INT NOT NULL,  
  `year` INT NOT NULL,  
  `due_date` DATE NOT NULL,  
  `total_units` INT NOT NULL,  
  `payable_amount` DOUBLE NOT NULL,  
  `is_payed` TINYINT NOT NULL,
```

```

`payment_date` DATE NULL,
`fine_amount` DOUBLE NULL,
`meter_id` INT NOT NULL,
PRIMARY KEY (`id`),
INDEX `fk_bill_meter1_idx` (`meter_id` ASC) VISIBLE,
CONSTRAINT `fk_bill_meter1`
  FOREIGN KEY (`meter_id`)
    REFERENCES `selectqueryhandson`.`meter` (`id`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;

```

```

-----
-- Table `selectqueryhandson`.`electricity_reading`
-----

CREATE TABLE IF NOT EXISTS `selectqueryhandson`.`electricity_reading` (
  `id` INT NOT NULL,
  `day` DATE NOT NULL,
  `meter_id` INT NOT NULL,
  `h1` INT NULL,
  `h2` INT NULL,
  `h3` INT NULL,
  `h4` INT NULL,
  `h5` INT NULL,
  `h6` INT NULL,
  `h7` INT NULL,
  `h8` INT NULL,
  `h9` INT NULL,

```

```
`h10` INT NULL,  
`h11` INT NULL,  
`h12` INT NULL,  
`h13` INT NULL,  
`h14` INT NULL,  
`h15` INT NULL,  
`h16` INT NULL,  
`h17` INT NULL,  
`h18` INT NULL,  
`h19` INT NULL,  
`h20` INT NULL,  
`h21` INT NULL,  
`h22` INT NULL,  
`h23` INT NULL,  
`h24` INT NULL,  
`total_units` INT NOT NULL,  
PRIMARY KEY (`id`),  
INDEX `fk_electricity_reading_meter1_idx` (`meter_id` ASC) VISIBLE,  
CONSTRAINT `fk_electricity_reading_meter1`  
    FOREIGN KEY (`meter_id`)  
    REFERENCES `selectqueryhandson`.`meter` (`id`)  
    ON DELETE NO ACTION  
    ON UPDATE NO ACTION)  
ENGINE = InnoDB;
```

```
SET SQL_MODE=@OLD_SQL_MODE;  
SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS;  
SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS;
```

Given Query Execution

```
use selectqueryhandson;
```

```
show tables;
```

```
insert into electricity_connection_type(id,connection_name) values (1,'Home'),(2,'Office'),(3,'Shopping Mall'),(4,'Hospital'),(5,'Restaurant');
```

```
select * from electricity_connection_type;
```

```
select * from electricity_connection_type order by connection_name;
```

```
insert into building_type(id,name,electricity_connection_type_id) values (1,'residential',1),(2,'hcl',2),(3,'EA',3),(4,'Apollo',4),(5,'BBQ',5);
```

```
select * from building_type order by name;
```

```
insert into building(id,owner_name,address,contact_number,email,building_type_id) values (1,'rahul','porur',9443070438,'perrirahul',1),(2,'perri','sholingalanur',94430,'rahulperri',2),(3,'mallaya','arcot',3070438,'mallayavijay',3),(4,'upasana','hyderabad',070438,'upasanakamineni',4),(5,'sajid','bangalore',70438,'sajiddhanani',5);
```

```
select owner_name,contact_number from building order by owner_name;
```

```
insert into meter(id,meter_number,building_id) values (1,123,1),(2,456,2),(3,789,3),(4,101,4),(5,112,5);
```

```
select meter_number from meter;
```

```
insert into
```

```
electricity_reading(id,day,meter_id,h1,h2,h3,h4,h5,h6,h7,h8,h9,h10,h11,h12,h13,h14,h15,h16,h17,h18,h19,h20,h21,h22,h23,h24,total_units) values (1,'2020-09-21',1,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,60),(2,'2020-09-21',2,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,70),(3,'2020-09-21',3,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,80),(4,'2020-09-21',4,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,90),(5,'2020-09-21',5,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,100);
```

```
select * from electricity_reading order by total_units;
```

```
insert into
```

```
bill(id,month,year,due_date,total_units,payable_amount,is_payed,payment_date,fine_amount,meter_id) values (1,09,'2020','2020-09-21',45,670,23,'2020-09-30',50,1),(2,09,'2019','2019-09-21',98,679,22,'2019-09-30',51,2),(3,01,'2020','2020-01-23',85,540,73,'2020-01-
```

```
30',10,3),(4,10,'2020','2020-10-21',25,370,13,'2020-10-30',30,4),(5,08,'2020','2020-08-22',55,770,33,'2020-08-30',60,5);
```

```
select total_units, payable_amount, fine_amount from bill order by total_units;
```

```
insert into slab(id,from_unit,to_unit,rate,electricity_connection_type_id) values  
(1,0,50,500,1),(2,76,45,765,2),(3,32,76,545,3),(4,5,76,346,4),(5,2,20,540,5);
```

```
select * from slab order by from_unit;
```

```
select * from building where owner_name='mallaya';
```

```
select * from bill where total_units>43 order by total_units desc;
```

```
update bill set due_date ='2020-09-21' where id=3;
```

```
select * from bill;
```

```
select * from bill where due_date='2020-09-21' order by payable_amount desc;
```

```
update building set email="" where id=2;
```

```
select owner_name,address,contact_number from building where email="" order by owner_name;
```

```
update building set owner_name='mrutyu' where id=2;
```

```
update building set owner_name='madhan' where id=5;
```

```
select * from building where owner_name like '%m%' order by owner_name;
```

```
update building set building_type_id=2 where id=5;
```

```
select * from building where building_type_id=2 order by owner_name;
```

```
select * from electricity_reading where total_units between 70 and 100 order by total_units;
```

```
select meter_id,total_units from electricity_reading where h13<h14 order by total_units desc;
```


