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 mydb

-- -----------------------------------------------------

-- -----------------------------------------------------

-- Schema handson1

-- -----------------------------------------------------

-- -----------------------------------------------------

-- Schema handson1

-- -----------------------------------------------------

CREATE SCHEMA IF NOT EXISTS `handson1` DEFAULT CHARACTER SET utf8 ;

USE `handson1` ;

-- -----------------------------------------------------

-- Table `handson1`.`electricity\_connection\_type`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `handson1`.`electricity\_connection\_type` (

`id` INT NOT NULL,

`connection\_name` VARCHAR(20) NOT NULL,

PRIMARY KEY (`id`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8;

-- -----------------------------------------------------

-- Table `handson1`.`building\_type`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `handson1`.`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 `handson1`.`electricity\_connection\_type` (`id`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8;

-- -----------------------------------------------------

-- Table `handson1`.`building`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `handson1`.`building` (

`id` INT(11) NOT NULL,

`owner\_name` VARCHAR(100) NOT NULL,

`address` VARCHAR(100) NOT NULL,

`contact\_number` VARCHAR(100) NOT NULL,

`email\_address` 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 `handson1`.`building\_type` (`id`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB;

-- -----------------------------------------------------

-- Table `handson1`.`meter`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `handson1`.`meter` (

`id` INT NOT NULL,

`meter\_number` VARCHAR(100) NOT NULL,

`building\_id` INT(11) NOT NULL,

PRIMARY KEY (`id`),

INDEX `fk\_meter\_building1\_idx` (`building\_id` ASC) VISIBLE,

CONSTRAINT `fk\_meter\_building1`

FOREIGN KEY (`building\_id`)

REFERENCES `handson1`.`building` (`id`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8;

-- -----------------------------------------------------

-- Table `handson1`.`bill`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `handson1`.`bill` (

`id` 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(1) NOT NULL,

`payment\_date` DATE NULL DEFAULT NULL,

`fine\_amount` DOUBLE NULL DEFAULT NULL,

`meter\_id` INT NOT NULL,

`month` INT NOT NULL,

PRIMARY KEY (`id`),

INDEX `fk\_bill\_meter1\_idx` (`meter\_id` ASC) VISIBLE,

CONSTRAINT `fk\_bill\_meter1`

FOREIGN KEY (`meter\_id`)

REFERENCES `handson1`.`meter` (`id`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8;

-- -----------------------------------------------------

-- Table `handson1`.`electricity\_reading`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `handson1`.`electricity\_reading` (

`Id` INT NOT NULL,

`day` DATE NOT NULL,

`h1` INT NULL DEFAULT NULL,

`h2` INT NULL DEFAULT NULL,

`h3` INT NULL DEFAULT NULL,

`h4` INT NULL DEFAULT NULL,

`h5` INT NULL DEFAULT NULL,

`h6` INT NULL DEFAULT NULL,

`h7` INT NULL DEFAULT NULL,

`h8` INT NULL DEFAULT NULL,

`h9` INT NULL DEFAULT NULL,

`h10` INT NULL DEFAULT NULL,

`h11` INT NULL DEFAULT NULL,

`h12` INT NULL DEFAULT NULL,

`h13` INT NULL DEFAULT NULL,

`h14` INT NULL DEFAULT NULL,

`h15` INT NULL DEFAULT NULL,

`h16` INT NULL DEFAULT NULL,

`h17` INT NULL DEFAULT NULL,

`h18` INT NULL DEFAULT NULL,

`h19` INT NULL DEFAULT NULL,

`h20` INT NULL DEFAULT NULL,

`h21` INT NULL DEFAULT NULL,

`h22` INT NULL DEFAULT NULL,

`h23` INT NULL DEFAULT NULL,

`h24` INT NULL DEFAULT NULL,

`total\_units` INT NOT NULL,

`meter\_id` 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 `handson1`.`meter` (`id`))

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8;

-- -----------------------------------------------------

-- Table `handson1`.`slab`

-- -----------------------------------------------------

CREATE TABLE IF NOT EXISTS `handson1`.`slab` (

`id` INT NOT NULL,

`from\_unit` INT NOT NULL,

`to\_unit` INT NOT NULL,

`rate` DOUBLE NOT NULL,

`electricity\_connection\_type\_id` INT NOT NULL,

PRIMARY KEY (`id`),

INDEX `fk\_slab\_electricity\_connection\_type1\_idx` (`electricity\_connection\_type\_id` ASC) VISIBLE,

CONSTRAINT `fk\_slab\_electricity\_connection\_type1`

FOREIGN KEY (`electricity\_connection\_type\_id`)

REFERENCES `handson1`.`electricity\_connection\_type` (`id`)

ON DELETE NO ACTION

ON UPDATE NO ACTION)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8;

SET SQL\_MODE=@OLD\_SQL\_MODE;

SET FOREIGN\_KEY\_CHECKS=@OLD\_FOREIGN\_KEY\_CHECKS;

SET UNIQUE\_CHECKS=@OLD\_UNIQUE\_CHECKS;

**QUERY EXECUTION:**

insert into electricity\_connection\_type(id,connection\_name) values (1,'College') ,(2,'Home') ,(3,'Mall') ,(4,'Industry'),(5,'Play centre');

SELECT \* FROM electricity\_connection\_type ORDER BY connection\_name;

insert into building\_type(id,name,electricity\_connection\_type\_id,meter\_id) values (1,'Domestic',1),(2,'Residential',2),(3,'commercial',3),(4,'Industrial',4),(5,'Non-commercia',5);

SELECT \* FROM building\_type ORDER BY name;

insert into building(id,owner \_name,address, contact\_number, email\_address, building\_type\_id) values (1,'Lakshmi','Chennai','9876546732','lakshmi@abc.com',1), (2,'Aishu','Pondy', '9876111132','aishu@abc.com',2), (3,'Nivedha', 'Yanam','9891524789', 'nivedha@abc.com',3), (4,'Anish ','mahe','7865312678','anish@abc.com',4), (5,'Sangavi','Delhi','8891678643','sangavi@abc.com',5); select owner\_name,contact\_number from building order by owner\_name;

INSERT INTO meter (id,meter\_number,building\_id) VALUES ((1,111,1),(2,222,2) ,(3,333,3) ,(4,444,4),(5,555,5));

select meter\_number from meter;

INSERT INTO electricity\_reading ( Id, day, 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, meter\_id) VALUES (1, '1998-12-21', 1, 2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,23,24, 50, 1),

(2,'1998-12-21', 5, 11,3,4,25,6,17,8,9,10,10,12,13,14,15,16,17,18,19,20,21,23,21, 100, 2),

(3, '1999-06-09', 8, 12,3,4,15,56,47,8,9,18,19,12,13,14,20,16,18,18,1,20,21,20,26, 55, 3), (4, '1999-10-17', 9, 2,13,4,45,6,27,8,9,10,18,14,13,14,10,16,17,18,9,20,21,13,22, 89, 4), (5, '2000-11-18', 4, 2,3,24,35,86,7,8,9,12,11,18,13,14,15,16,17,18,19,7,21,23,27, 45, 5);

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\_i d) values (1,09,'2020','2020-09-21',20,111,21,'2020-09-30',55,1), (2,09, '2019', '2019-09- 21',39,222,22,'2019-09-30',23,2), (3,01,'2018','2018-08-27',80,777,73,'2018-12- 30',75,3), (4,10,'2019','2019-12-21',76,456,43,'2019-12-30',90,4), (5,08,'2020','2020-08- 22',95,346,73,'2020 08-30',12,5);

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 (1,5,50,555,1),(2,10,45,666,2),(3,15,77,777,3),(4,20,46,888,4),(5,25,20,999,5);

select \* from slab order by from units;

select \* from building where owner\_name='Aishu';  
select \* from bill where total\_units>39 order by total\_units desc;

update bill set due\_date ='2018-08-27' where id=3; select \* from bill;

select \* from bill where due\_date='2019-09- 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='Aishu' where id=2; update building set owner\_name='Sangavi' 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 45 and 50 order by total\_units;

select meter\_id,total\_units from electricity\_reading where h13<h14 order by total\_units desc;