Q1. Create a table tasks with the following data

Column Datatype Constraint

task_id int Primary

key,autoincrement

title Varchar(255) Not null

Start_date date

Due_date date

status tinyint Not null

priority tinyint Not null

Description text

Created_at timestamp Default (current

timestamp)

```
mysql> desc tasks;
+-------------+--------------+------+-----+-------------------+-------------------+
| Field       | Type         | Null | Key | Default           | Extra             |
+-------------+--------------+------+-----+-------------------+-------------------+
| task_id     | int          | NO   | PRI | NULL              | auto_increment    |
| title       | varchar(255) | NO   |     | NULL              |                   |
| start_date  | date         | YES  |     | NULL              |                   |
| due_date    | date         | YES  |     | NULL              |                   |
| status      | tinyint      | NO   |     | NULL              |                   |
| priority    | tinyint      | NO   |     | NULL              |                   |
| description | text         | YES  |     | NULL              |                   |
| created_at  | timestamp    | YES  |     | CURRENT_TIMESTAMP | DEFAULT_GENERATED |
+-------------+--------------+------+-----+-------------------+-------------------+
8 rows in set (0.02 sec)
```

Q2. Create a table checklists with the following data

Column Datatype Constraint

todo_id int autoincrement

taskid int Foreign key

referencing task_id

column of tasks

table

todo Varchar(255) Not Null

```
mysql> create table checklists(todo_id int auto_increment primary key,taskid
 int,todo varchar(255) not null,foreign key (taskid) references tasks(task_i
d));
Query OK, 0 rows affected (0.04 sec)

mysql> desc checklists;
+---------+--------------+------+-----+---------+----------------+
| Field   | Type         | Null | Key | Default | Extra          |
+---------+--------------+------+-----+---------+----------------+
| todo_id | int          | NO   | PRI | NULL    | auto_increment |
| taskid  | int          | YES  | MUL | NULL    |                |
| todo    | varchar(255) | NO   |     | NULL    |                |
+---------+--------------+------+-----+---------+----------------+
3 rows in set (0.00 sec)
```

Q3. Insert,update and delete different values and check.

```
mysql> insert into tasks(title,status,priority) values('first',1,2);
```

```
mysql> select * from tasks;
+---------+-------+------------+----------+--------+----------+-------------+---------------------+
| task_id | title | start_date | due_date | status | priority | description | create_at           |
+---------+-------+------------+----------+--------+----------+-------------+---------------------+
|       1 | first | NULL       | NULL     |      1 |        2 | NULL        | 2023-09-25 16:51:43 |
+---------+-------+------------+----------+--------+----------+-------------+---------------------+
1 row in set (0.00 sec)
```

Update:

```
mysql> update tasks set priority = 5 where task_id=1;
```

Check:

```
mysql> select * from tasks;
+---------+-------+------------+----------+--------+----------+-------------+---------------------+
| task_id | title | start_date | due_date | status | priority | description | create_at           |
+---------+-------+------------+----------+--------+----------+-------------+---------------------+
|       1 | first | NULL       | NULL     |      1 |        5 | NULL        | 2023-09-25 16:51:43 |
+---------+-------+------------+----------+--------+----------+-------------+---------------------+
1 row in set (0.00 sec)
```

Q4. Create a table named parts with columns part_no varchar(18),description varchar(40), cost decimal(10,2), price decimal(10,2). Make part_no s the primary key.Rows should be inserted into the table only if the value of cost is greater than 0,price is greater than 0 and the value of price is greater than or equal to 0

```
mysql> create table parts(part_no varchar(18) primary key,
    -> description varchar(40),
    -> cost decimal(10,2) check(cost>0),
    -> price decimal(10,2) check(price>=0));
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> desc parts;
+-------------+---------------+------+-----+---------+-------+
| Field       | Type          | Null | Key | Default | Extra |
+-------------+---------------+------+-----+---------+-------+
| part_no     | varchar(18)   | NO   | PRI | NULL    |       |
| description | varchar(40)   | YES  |     | NULL    |       |
| cost        | decimal(10,2) | YES  |     | NULL    |       |
| price       | decimal(10,2) | YES  |     | NULL    |       |
+-------------+---------------+------+-----+---------+-------+
4 rows in set (0.00 sec)
```

Q.5 Create a table categories with the following data.Column Datatype Constraint Categoryid int Primary key,autoincrement categoryname Varchar(255) Not null

```
mysql> create table categories (category_id int primary key auto_increment,categoryname varc
har(255) not null);
Query OK, 0 rows affected (0.02 sec)

mysql> desc categories;
+-------------+-------------+------+-----+---------+----------------+
| Field       | Type        | Null | Key | Default | Extra          |
+-------------+-------------+------+-----+---------+----------------+
| category_id | int         | NO   | PRI | NULL    | auto_increment |
| categoryname | varchar(255) | NO   |     | NULL    |                |
+-------------+-------------+------+-----+---------+----------------+
2 rows in set (0.00 sec)
```

Q6. Create a table products with the following dataColumn Datatype Constraintproductid int Primary key,autoincrementproductname Varchar(255) Not nullcategoryid int Not NullForeign key referencing categoryid ofcategories table andgive the options on delete cascade andon update cascade

Insert values into both the tables and try deleting and updating the primary key values

Check the result in the child table

```
mysql> create table product(product_id int primary key auto_increment,productname varchar(25
5) not null,category_id int not null,foreign key(category_id) references categories(category
_id) on delete cascade on update cascade);
Query OK, 0 rows affected (0.02 sec)

mysql> desc product;
+-------------+-------------+------+-----+---------+----------------+
| Field       | Type        | Null | Key | Default | Extra          |
+-------------+-------------+------+-----+---------+----------------+
| product_id  | int         | NO   | PRI | NULL    | auto_increment |
| productname | varchar(255) | NO   |     | NULL    |                |
| category_id | int         | NO   | MUL | NULL    |                |
+-------------+-------------+------+-----+---------+----------------+
3 rows in set (0.00 sec)
```

Insert values in both the table:

Insert into categories table:

```
mysql> insert into categories(categoryname) values ('TOYS');
Query OK, 1 row affected (0.00 sec)

mysql> select * from categories;
+-------------+--------------+
| category_id | categoryname |
+-------------+--------------+
|           1 | TOYS         |
+-------------+--------------+
1 row in set (0.00 sec)
```

```
mysql> insert into product(productname, category_id) values('mobile',1);
Query OK, 1 row affected (0.01 sec)
```

```
mysql> select * from product;
+------------+-------------+-------------+
| product_id | productname | category_id |
+------------+-------------+-------------+
|          1 | mobile      |           1 |
+------------+-------------+-------------+
1 row in set (0.00 sec)
```

Deleting category:

```
mysql> delete from categories where category_id=1;
Query OK, 1 row affected (0.01 sec)
```

Updating a category:

```
mysql> select * from categories;
+-------------+--------------+
| category_id | categoryname |
+-------------+--------------+
|           2 | cloths       |
+-------------+--------------+
1 row in set (0.00 sec)
```

```
mysql> update categories set category_id=3 where category_id=2;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from categories;
+-------------+--------------+
| category_id | categoryname |
+-------------+--------------+
|           3 | cloths       |
+-------------+--------------+
1 row in set (0.00 sec)
```

```
mysql> select * from product;
+------------+-------------+-------------+
| product_id | productname | category_id |
+------------+-------------+-------------+
|          1 | mobile      |           1 |
+------------+-------------+-------------+
1 row in set (0.00 sec)
```

```
mysql> select * from product;
+------------+-------------+-------------+
| product_id | productname | category_id |
+------------+-------------+-------------+
|          3 | paper       |           3 |
+------------+-------------+-------------+
1 row in set (0.00 sec)
```