**SQL Case study required code for creating tables of Patients:**

//for creating a patient table

CREATE TABLE `test`.`patient\_table` (

`Name` VARCHAR(45) NOT NULL,

`Address` VARCHAR(100) NOT NULL,

`Date\_of\_Birth` VARCHAR(45) NOT NULL,

`Contact\_Details` VARCHAR(12) NOT NULL,

PRIMARY KEY (`Name`),

UNIQUE INDEX `Contact\_Details\_UNIQUE` (`Contact\_Details` ASC) VISIBLE);

//for creating a medical history table

CREATE TABLE `test`.`medical\_history\_table` (

`Diagnoses\_Yes\_Or\_No` VARCHAR(10) NOT NULL,

`Treatements` VARCHAR(10) NOT NULL,

`Surgeries` VARCHAR(10) NOT NULL,

`Medication` VARCHAR(10) NOT NULL,

PRIMARY KEY (`Diagnoses\_Yes\_Or\_No`));

//for creating a lab result table

CREATE TABLE `test`.`lab\_result\_table` (

`Blood\_Test` VARCHAR(10) NOT NULL,

`Urine\_Test` VARCHAR(10) NOT NULL,

`Imaging\_Test` VARCHAR(10) NOT NULL);

//for creating a prescription table

CREATE TABLE `test`.`prescription\_table` (

`Medicine\_Name` VARCHAR(45) NOT NULL,

`Dosage` VARCHAR(45) NOT NULL,

`Frequency` VARCHAR(45) NOT NULL,

PRIMARY KEY (`Medicine\_Name`));

//for creating a out come table

CREATE TABLE `test`.`out\_come\_table` (

`Read\_Mission\_Rates` INT NOT NULL,

`Medication\_Adherence` VARCHAR(45) NOT NULL,

PRIMARY KEY (`Read\_Mission\_Rates`));

**Creating tables for Library Management System**

//for creating book table

create table book\_table(book\_id int,title varchar(20),author varchar(20),publisher varchar(20),publication\_year date,isbn int,genre varchar(10),availability boolean,primary key(book\_id));

//for creating borrowers table

create table borrowers\_table(borrower\_id int,name varchar(30),address varchar(50),phone\_number numeric,email varchar(20),primary key(borrower\_id));

//for creating loans table

create table loans\_table(loan\_id int,book\_id int,borrower\_id int,date\_borrowed date,due\_date date,date\_returned date,foreign key(book\_id) references book\_table(book\_id),foreign key(borrower\_id) references borrowers\_table(borrower\_id),PRIMARY key(loan\_id));

//for creating reservation table

create table reservations\_table(reservation\_id int,book\_id int,borrower\_id int,date\_reserved date,date\_needed date,status varchar(10),primary key(reservation\_id), foreign key(book\_id) references book\_table(book\_id),foreign key(borrower\_id) references borrowers\_table(borrower\_id));

**QUERYING THE DATABASE:**

SELECT FROM book\_table WHERE availability = 1;

**Get all borrowed books:**

SELECT book\_table.title, book\_table.author, borrowers\_table.name, loans\_table.dateborrowed, loans\_table.due\_date

FROM Books

INNER JOIN Loans ON book\_table.book\_id = loans\_table.book\_id

INNER JOIN Borrowers ON loans\_table.borrower\_id = borrowers\_table.borrower\_id;

**Get all reserved books:**

SELECT book\_table.title, book\_table.author, borrowers\_table.name, reservations\_table.date\_reserved,

Reservations\_table.date\_needed

FROM book\_table

INNER JOIN reservations\_table ON book\_table.book\_id = reservations\_table.book\_id;