DBMS ASSIGNMENT – 3

SEQUENTIAL QUERY LANGUAGE

Roll Number: U19CS012

Name: BHAGYA VINOD RANA

Q1) Create a table **Student** with fields

RollNo Number (6) Primary key
Name Character (25)
Semester Number (3)
DOB Date
AdmissionDate Date
HostelRoom Number (5) (Null values allowed)

Insert 10 Rows in the above created table.
SQL-Code [SQLite 3.29.0]:

```
BEGIN TRANSACTION;

CREATE TABLE STUDENT(
    roll_no integer PRIMARY KEY,
    name text,
    semester integer,
    -- YEAR MONTH DAY [Important Mistake!]
    date_of_birth DATE,
    admission_date DATE,
    hostel_room integer
    -- Null Values also Allowed in Hostel Room
);

-- Insert 10 Rows in the above created table.

INSERT INTO STUDENT VALUES(
    101,
    'Bhagya',
    4,
    '2001-01-02',
    '2001-02-03',
    104
);

INSERT INTO STUDENT VALUES(
    201,
    'Nobita',
```

```
    3,
    '2001-03-04',
    '2001-04-05',
    745
);

INSERT INTO STUDENT VALUES(
    103,
    'Doraemon',
    5,
    '2001-05-06',
    '2001-06-07',
    450
);

INSERT INTO STUDENT VALUES(
    204,
    'Shizuka',
    4,
    '2001-07-08',
    '2001-08-09',
    789
);

INSERT INTO STUDENT VALUES(
    150,
    'Sunio',
    4,
    '2001-09-02',
    '2001-10-03',
    912
);

INSERT INTO STUDENT VALUES(
    612,
    'Gian',
    3,
    '2000-11-04',
    '2001-12-05',
    312
);

INSERT INTO STUDENT VALUES(
    107,
    'Kiteretsu',
    4,
    '2001-01-06',
    '2001-02-07',
    390
);
```

```sql
INSERT INTO STUDENT VALUES(
    118,
    'Shinchan',
    2,
    '2001-03-08',
    '2001-04-09',
    881
);

INSERT INTO STUDENT VALUES(
    190,
    'Harry',
    6,
    '2000-05-02',
    '2001-06-03',
    654
);

INSERT INTO STUDENT VALUES(
    210,
    'Salman',
    4,
    '2000-07-04',
    '2001-08-07',
    981
);

-- Saving the Work
COMMIT;

-- 1. Student table with all columns and rows.
SELECT * FROM STUDENT;

-- 2. Student details with columns Roll number and Name only.
SELECT roll_no, name FROM STUDENT;

-- 3. Student details of all the students who are in 4th semester.
SELECT * FROM STUDENT WHERE semester==4;

-- 4. Student details of all the students whose roll number is between 100 to 200.
SELECT * FROM STUDENT WHERE roll_no>=100 and roll_no<=200;

-- 5. Student details of all the students whose DOB is greater than 1st jan 2001.
SELECT * FROM STUDENT WHERE date_of_birth > '2001-01-01';
```

Display the below details.

1. Student table with all columns and rows.

```
101|Bhagya|4|2001-01-02|2001-02-03|104
103|Doraemon|5|2001-05-06|2001-06-07|450
107|Kiteretsu|4|2001-01-06|2001-02-07|390
118|Shinchan|2|2001-03-08|2001-04-09|881
150|Sunio|4|2001-09-02|2001-10-03|912
190|Harry|6|2000-05-02|2001-06-03|654
201|Nobita|3|2001-03-04|2001-04-05|745
204|Shizuka|4|2001-07-08|2001-08-09|789
210|Salman|4|2000-07-04|2001-08-07|981
612|Gian|3|2000-11-04|2001-12-05|312
```

2. Student details with columns **Roll number** and **Name** only.

```
101|Bhagya
103|Doraemon
107|Kiteretsu
118|Shinchan
150|Sunio
190|Harry
201|Nobita
204|Shizuka
210|Salman
612|Gian
```

3. Student details of all the students who are in **4th semester**.

```
101|Bhagya|4|2001-01-02|2001-02-03|104
107|Kiteretsu|4|2001-01-06|2001-02-07|390
150|Sunio|4|2001-09-02|2001-10-03|912
204|Shizuka|4|2001-07-08|2001-08-09|789
210|Salman|4|2000-07-04|2001-08-07|981
```

4. Student details of all the students whose **Roll number** is Between **100 to 200**.

```
101|Bhagya|4|2001-01-02|2001-02-03|104
103|Doraemon|5|2001-05-06|2001-06-07|450
107|Kiteretsu|4|2001-01-06|2001-02-07|390
118|Shinchan|2|2001-03-08|2001-04-09|881
150|Sunio|4|2001-09-02|2001-10-03|912
190|Harry|6|2000-05-02|2001-06-03|654
```

5. Student details of all the students whose **DOB** is greater than **1st Jan 2001.**

```
101|Bhagya|4|2001-01-02|2001-02-03|104
103|Doraemon|5|2001-05-06|2001-06-07|450
107|Kiteretsu|4|2001-01-06|2001-02-07|390
118|Shinchan|2|2001-03-08|2001-04-09|881
150|Sunio|4|2001-09-02|2001-10-03|912
201|Nobita|3|2001-03-04|2001-04-05|745
204|Shizuka|4|2001-07-08|2001-08-09|789
```

Q2) Create a table **Employee** with fields

EmpID Number (6) Primary key
Name Character (25)
Department Character (30)
Manager ID Number (6)
JoiningDate Date
Salary Number (8)

Insert 10 Rows in the above created table.

SQL-Code [SQLite 3.29.0]:

```sql
BEGIN TRANSACTION;

CREATE TABLE EMPLOYEE(
    emp_id integer PRIMARY KEY,
    emp_name text,
    department text,
    manager_id integer,
    -- YEAR MONTH DAY [Important Mistake!]
    joining_date DATE,
    salary integer
);

-- Insert 10 Rows in the above created table.

INSERT INTO EMPLOYEE VALUES(
    4123,
    'Ninja_Hatori',
    'Production',
    1002,
    '2020-04-01',
    65000
);

INSERT INTO EMPLOYEE VALUES(
    4129,
    'Garfield',
    'Research',
    1027,
    '2018-04-02',
    45000
);

INSERT INTO EMPLOYEE VALUES(
    4230,
    'Mickey',
    'Marketing',
    1022,
```

```
    '2020-04-03',
    35000
);

INSERT INTO EMPLOYEE VALUES(
    4428,
    'Kiteretsu',
    'Accounting',
    1002,
    '2019-04-04',
    75000
);

INSERT INTO EMPLOYEE VALUES(
    4073,
    'Shizuka',
    'HR',
    1027,
    '2020-04-05',
    60000
);

INSERT INTO EMPLOYEE VALUES(
    4983,
    'Mr.Bean',
    'HR',
    1002,
    '2017-04-06',
    100000
);

INSERT INTO EMPLOYEE VALUES(
    4009,
    'Nobita',
    'Research',
    1022,
    '2015-04-07',
    50000
);

INSERT INTO EMPLOYEE VALUES(
    4773,
    'Doraemon',
    'Marketing',
    1042,
    '2020-04-08',
    25000
);

INSERT INTO EMPLOYEE VALUES(
```

```
    4833,
    'Gian',
    'Accounting',
    1102,
    '2018-04-09',
    95000
);

INSERT INTO EMPLOYEE VALUES(
    4337,
    'Donald',
    'HR',
    1082,
    '2020-04-10',
    55000
);

-- Saving the Work
COMMIT;

-- 1. Employee table with all columns and rows.
SELECT * FROM EMPLOYEE;
-- 2. Employee details with columns Name and Department only.
SELECT emp_name, department FROM EMPLOYEE;
-- 3. Employee details of all the Employees who are in HR department.
SELECT * FROM EMPLOYEE where department=='HR';
-- 4. Employee details of all the Employees whose salary is between 50000 to 100000.
SELECT * FROM EMPLOYEE WHERE salary>=50000 and salary<=100000;
-- 5. Employee details of all the Employees whose JoiningDate is greater than 1st jan 2020.
SELECT * FROM EMPLOYEE WHERE joining_date > '2020-01-01';
```

Display the below details.

1. Employee table with **all columns and rows**.

```
4009|Nobita|Research|1022|2015-04-07|50000
4073|Shizuka|HR|1027|2020-04-05|60000
4123|Ninja_Hatori|Production|1002|2020-04-01|65000
4129|Garfield|Research|1027|2018-04-02|45000
4230|Mickey|Marketing|1022|2020-04-03|35000
4337|Donald|HR|1082|2020-04-10|55000
4428|Kiteretsu|Accounting|1002|2019-04-04|75000
4773|Doraemon|Marketing|1042|2020-04-08|25000
4833|Gian|Accounting|1102|2018-04-09|95000
4983|Mr.Bean|HR|1002|2017-04-06|100000
```

2. Employee details with columns **Name** and **Department** only.

```
Nobita|Research
Shizuka|HR
Ninja_Hatori|Production
Garfield|Research
Mickey|Marketing
Donald|HR
Kiteretsu|Accounting
Doraemon|Marketing
Gian|Accounting
Mr.Bean|HR
```

3. Employee details of all the Employees who are in **HR** department.

```
4073|Shizuka|HR|1027|2020-04-05|60000
4337|Donald|HR|1082|2020-04-10|55000
4983|Mr.Bean|HR|1002|2017-04-06|100000
```

4. Employee details of all the Employees whose **salary** is between **50000 to 100000**.

```
4009|Nobita|Research|1022|2015-04-07|50000
4073|Shizuka|HR|1027|2020-04-05|60000
4123|Ninja_Hatori|Production|1002|2020-04-01|65000
4337|Donald|HR|1082|2020-04-10|55000
4428|Kiteretsu|Accounting|1002|2019-04-04|75000
4833|Gian|Accounting|1102|2018-04-09|95000
4983|Mr.Bean|HR|1002|2017-04-06|100000
```

5. Employee details of all the Employees whose **JoiningDate** is greater than **1st jan 2020**.

```
4073|Shizuka|HR|1027|2020-04-05|60000
4123|Ninja_Hatori|Production|1002|2020-04-01|65000
4230|Mickey|Marketing|1022|2020-04-03|35000
4337|Donald|HR|1082|2020-04-10|55000
4773|Doraemon|Marketing|1042|2020-04-08|25000
```

Submitted By:

BHAGYA VINOD RANA

U19CS012