sASSIGNMENT-2

Q1).

(i) Create, update and delete commands in sql.

Ans).

Creating Tables

```
mysql> use vit_university
Database changed
mysql> # IshanSati 20BCT0201
mysql> create table Employee(
    -> First_Name varchar(15),
    -> Mid_Name char(2),
    -> Last_Name varchar(15),
    -> SSN_Number char(9),
    -> Birthday Date,
    -> Address varchar(50),
    -> Sex char(1),
    -> Salary int(7),
    -> Supervisor_SSN char(9),
    -> Department_Number int(5));
Query OK, 0 rows affected, 2 warnings (0.18 sec)
```

```
mysql> #ISHAN SATI 20BCT0201
mysql>
mysql> create table Department(
    -> Department_name varchar(15),
    -> Department_Number int(5),
    -> Manager_SSN char(9),
    -> Manage_Start_Date date); #ISHAN SATI 20BCT0201
Query OK, 0 rows affected, 1 warning (0.07 sec)
```

```
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual
 that corresponds to your MySQL server version for the right syntax to use
 near 'Number int(5))' at line 5
mysql> create table Project(
    -> Project_Name varchar(15), #ISHAN SATI 20BCT0201
    -> Project_Number int(5),
    -> Project_Location varchar(15),
    -> Department_Number int(5));
Query OK, 0 rows affected, 2 warnings (0.07 sec)

mysql>
```

Inserting Values:

```
mysql>
mysql> #ISHAN SATI 20BCT0201
mysql> insert into Employee values('Doug', 'E', 'Gilbert', 123, '1968-06-09', 'Chennai','M', 80000, NULL, 1);

Query OK, 1 row affected (0.07 sec)

mysql> ISHAN SATI 20BCT0201
    -> ;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL ser
ver version for the right syntax to use near 'ISHAN SATI 20BCT0201' at line 1
mysql>
mysql>
mysql> #ISHAN SATI 20BCT0201
mysql> insert into Employee values('Joyce', NULL, 'Pan', 124, '1973-02-07', 'Vellore', 'F', 70000, NULL,1);
Query OK, 1 row affected (0.03 sec)

mysql> insert into Employee values('Franklin', 'T', 'Wong', 125, '1972-12-08', 'Delhi', 'M', 40000, 123, 2);
#ISHAN SATI 20BCT0201
Query OK, 1 row affected (0.02 sec)

mysql> #ISHAN SATI 20BCT0201
mysql> insert into Employee values('Jennifer', 'S', 'Wallace', 564, '1983-06-20', 'Chennai', 'F', 43000, 123,
 2);
Query OK, 1 row affected (0.03 sec)

mysql> #ISHAN SATI 20BCT0201
mysql> insert into Employee values('John', 'B', 'Smith', 678, '1987-01-09', 'Madurai', 'M', 30000, 124,1);
Query OK, 1 row affected (0.02 sec)

mysql> #ISHAN SATI 20BCT0201
mysql> insert into Employee values('Ramesh', 'K', 'Narayan', 234, '1985-09-15', 'Banglore', 'M', 38000,124,3)
;
Query OK, 1 row affected (0.03 sec)

mysql>
```

```
mysql> insert into Department values('Headquarter',1,678,'2014-12-16')
;
Query OK, 1 row affected (0.02 sec)

mysql> #ISHAN SATI 20BCT0201
mysql> insert into Department values('Finance',3,234,'2013-05-18');
Query OK, 1 row affected (0.03 sec)

mysql> #ISHAN SATI 20BCT0201
mysql> insert into Department values('IT', 4,123,'2015-06-12');
Query OK, 1 row affected (0.03 sec)
```

```
mysql> insert into Department values('Administration', 2,564,'2012-01-03');
Query OK, 1 row affected (0.02 sec)

mysql> #ISHAN SATI 20BCT0201
```

```
mysql> insert into Project values('ProjectA', 3388, 'Delhi',1);
Query OK, 1 row affected (0.04 sec)

mysql> #ISHAN SATI 20BCT0201
mysql> insert into Project values('ProjectB',1945,'Hyedrabad',1);
Query OK, 1 row affected (0.02 sec)

mysql> #ISHAN SATI 20BCT0201
mysql> insert into Project values('ProjectC',6688,'Chennai',2);
Query OK, 1 row affected (0.02 sec)

mysql> #ISHAN SATI 20BCT0201
mysql> insert into Project values('ProjectD', 2423,'Chennai',2);
Query OK, 1 row affected (0.02 sec)
```

Using Update

```
mysql>
mysql> #ISHAN SATI 20BCT0201
mysql> update Employee
    -> set Department_Number = 2
    -> where First_Name = 'Joyce';
Query OK, 1 row affected (0.07 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> _
```

```
mysql> #ISHAN SATI 20BCT0201
mysql> UPDATE Department
    -> set Department_Phone_Number = '0987654321'
    -> where Department_name= 'Finance';
Query OK, 1 row affected (0.02 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```
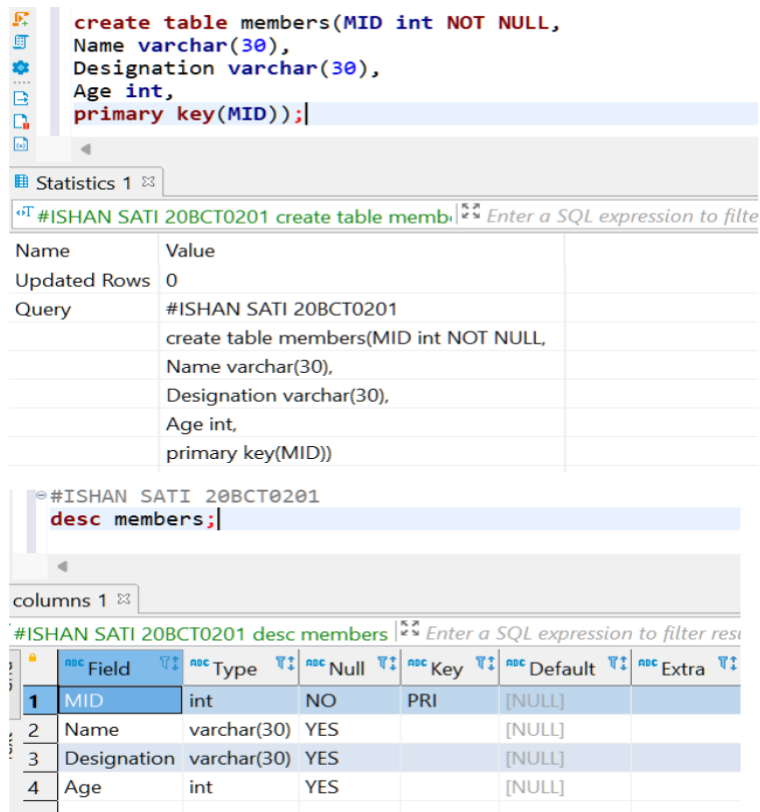
Using Alter:

```
mysql> alter table Department
    -> rename column Department_Phone_Number to PhNo;
Query OK, 0 rows affected (0.20 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

(ii) Create tables and perform joins in sql.

Ans).

Creating Tables

```
create table members(MID int NOT NULL,
Name varchar(30),
Designation varchar(30),
Age int,
primary key(MID));
```

Statistics 1 ⊠

T #ISHAN SATI 20BCT0201 create table memb⋮ ⤢ Enter a SQL expression to filte

Name	Value
Updated Rows	0
Query	#ISHAN SATI 20BCT0201
	create table members(MID int NOT NULL,
	Name varchar(30),
	Designation varchar(30),
	Age int,
	primary key(MID))

```
#ISHAN SATI 20BCT0201
desc members;
```

columns 1 ⊠

#ISHAN SATI 20BCT0201 desc members ⤢ Enter a SQL expression to filter res⋮

	Field	Type	Null	Key	Default	Extra
1	MID	int	NO	PRI	[NULL]	
2	Name	varchar(30)	YES		[NULL]	
3	Designation	varchar(30)	YES		[NULL]	
4	Age	int	YES		[NULL]	

```
create table books(BID int NOT NULL,
Btitle varchar(200),
Bauthor varchar(200),
Bprice int,
primary key(BID));
```

Statistics 1 ⊠

#ISHAN SATI 20BCT0201 create table books(⤢ Enter a SQL

Name	Value
Updated Rows	0
Query	#ISHAN SATI 20BCT0201
	create table books(BID int NOT NULL,
	Btitle varchar(200),
	Bauthor varchar(200),
	Bprice int,
	primary key(BID))

```
create table Reserves(MID int,
BID int,
Date date,
foreign key(MID) references members(MID),
foreign key(BID) references books(BID),
primary key(MID,BID));
```

Statistics 1 ⊠

#ISHAN SATI 20BCT0201 create table Reserve ⤢ Enter a SQL expressio

Name	Value
Updated Rows	0
Query	#ISHAN SATI 20BCT0201
	create table Reserves(MID int,
	BID int,
	Date date,
	foreign key(MID) references members(MID),
	foreign key(BID) references books(BID),
	primary key(MID,BID))

Inserting Values:

```
insert into members values(1,"ishan","boss",20);
insert into members values(2,"shailesh","officer",50);
insert into members values(3,"parul","manager",45);
insert into members values(4,"ayaan","worker",11);
```

Statistics 1 ⊠

insert into members values(4,"ayaan","worker ⤢ Enter a SQL expression to filter results (use Ctrl+

Name	Value
Updated Rows	1
Query	insert into members values(4,"ayaan","worker",11)

```
insert into reserves values(1,1,'2021-2-23');
insert into reserves values(2,3,'2021-3-23');
insert into reserves values(2,4,'2021-6-12');
insert into reserves values(3,2,'2020-5-10');
```

Statistics 1 ⌗

⊕ᵀ insert into reserves valu ⤢ Enter a SQL expression to filter results ▶ ▼

Name	Value
Updated Rows	1
Query	insert into reserves values(3,2,'2020-5-10')

Using Join:

```
select books.Bauthor, books.Btitle from reserves inner join books on reserves.BID = books.BID
where reserves.Date ='2021-2-23';
```

books 1 ⌗

⊕ᵀ #ISHAN SATI 20BCT0201 select books.Bauth ⤢ Enter a SQL expression to filter results (use Ctrl+Space)

	Bauthor	Btitle
1	jhumpa lahiri	namesake

```
select members.name from members left join reserves on members.MID = reserves.MID
where reserves.MID IS NULL;
```

members 1 ⌗

⊕ᵀ #ISHAN SATI 20BCT0201 s ⤢ Enter a SQL expression to filter results (use Ctrl+Space)   ▶ ▼ ⊘ ▽ 🔣 ⊗ ▼ ← ▼

	name		⌗
1	ayaan		ay

```
select books.Btitle from books left join reserves on books.BID = reserves.BID
where reserves.BID IS NULL;
```

books 1 ⌗

⊕ᵀ #ISHAN SATI 20BCT0201 sele ⤢ Enter a SQL expression to filter results (use Ctrl+Space)   ▶ ▼ ⊘ ▽ 🔣 ⊗ ▼

	Btitle

(iii) Create, update and delete commands in Mongo

```
mongosh mongodb://localho  ×   +  ∨                                                            —  ☐  ✕

Please enter a MongoDB connection string (Default: mongodb://localhost/): mongodb://localhost
mongodb://localhost
Current Mongosh Log ID: 647362568a2971696b5c94cf
Connecting to:          mongodb://localhost/?directConnection=true&serverSelectionTimeoutMS=2000&appName=mongosh+1.3.1
Using MongoDB:          5.0.7
Using Mongosh:          1.3.1

For mongosh info see: https://docs.mongodb.com/mongodb-shell/

------
   The server generated these startup warnings when booting:
   2023-05-21T04:18:59.553+05:30: Access control is not enabled for the database. Read and write access to data and configuration is
unrestricted
------
```

```
test> show dbs
SmartBridge                      8.19 kB
Target                           57.3 kB
admin                              41 kB
config                            111 kB
local                            94.2 kB
mongodbVSCodePlaygroundDB          41 kB
test> use SmartBridge
switched to db SmartBridge
SmartBridge> db.creteCollection(name,options)
ReferenceError: name is not defined
SmartBridge> show collections
Smart
SmartBridge> db.mycollections.drop()
false
SmartBridge> db.mycollection.drop
[Function: drop] AsyncFunction {
  apiVersions: [ 1, Infinity ],
  returnsPromise: true,
  serverVersions: [ '0.0.0', '999.999.999' ],
  topologies: [ 'ReplSet', 'Sharded', 'LoadBalanced', 'Standalone' ],
  returnType: { type: 'unknown', attributes: {} },
  deprecated: false,
  platforms: [ 0, 1, 2 ],
  isDirectShellCommand: false,
  acceptsRawInput: false,
  shellCommandCompleter: undefined,
  help: [Function (anonymous)] Help
```

```
SmartBridge> db.mycol.insert({
... _id:ObjectId,
... title: "Intern",
... description: "MongoDB Practice",
... })
DeprecationWarning: Collection.insert() is deprecated. Use insertOne, insertMany, or bulkWrite.
{
  acknowledged: true,
  insertedIds: {
    '0': [Function: ObjectId] {
      getInc: [Function (anonymous)],
      generate: [Function (anonymous)],
      createPk: [Function (anonymous)],
      createFromTime: [Function (anonymous)],
      createFromHexString: [Function (anonymous)],
      isValid: [Function (anonymous)],
      fromExtendedJSON: [Function (anonymous)],
      index: 8028621,
      help: [Function (anonymous)] Help
    }
  }
}
```

```
SmartBridge> db.mycol.find().pretty()
[
  {
    _id: Code("function ObjectId(id) {
          (0, helpers_1.assertArgsDefinedType)([id], [[undefined, 'string', 'number', 'object']], 'ObjectId');
          return new bson.ObjectId(id);
      }"),
    title: 'Intern',
    description: 'MongoDB Practice'
  }
]
SmartBridge> db.runCommand(
... {
..... update: mycol,
..... updates: [
..... {
....... |
```