

MODERN APPLICATION DEVELOPMENT – JAVA SPRING BOOT

WEEK 2 ASSIGNMENT

NAME: YOGAVARSHNI D

REGISTER NUMBER: 20BCE2339

MYSQL: CREATION, UPDATE, DELETE

TABLE CREATION:

```
SQL> create table students(  
  2  name varchar2(20),  
  3  reg_number varchar2(10),  
  4  course_code varchar2(10),  
  5  subject varchar2(10),  
  6  marks integer);
```

Table created.

INSERTING VALUES INTO TABLE:

```
SQL> insert into students values('Yogavarshni','20BCE2339','CSE3021','SIN',93);
```

1 row created.

```
SQL> insert into students values('Priya','20BCE2380','CSE2014','DSA',85);
```

1 row created.

```
SQL> insert into students values('Shalini','20BCE0763','MGT1022','LSM',79);
```

1 row created.

```
SQL> insert into students values('Nabeeha','20BCT0275','CSE3009','IoT',89);
```

1 row created.

```
SQL> select * from students;
```

NAME	REG_NUMBER	COURSE_COD	SUBJECT	MARKS
Yogavarshni	20BCE2339	CSE3021	SIN	93
Priya	20BCE2380	CSE2014	DSA	85
Shalini	20BCE0763	MGT1022	LSM	79
Nabeeha	20BCT0275	CSE3009	IoT	89

UPDATING THE VALUE:

```
SQL> update students set name='Kaaviya',reg_number='20BEC0183' where subject='DSA';
```

```
1 row updated.
```

```
SQL> select * from students;
```

NAME	REG_NUMBER	COURSE_COD	SUBJECT	MARKS
Yogavarshni	20BCE2339	CSE3021	SIN	93
Kaaviya	20BEC0183	CSE2014	DSA	85
Shalini	20BCE0763	MGT1022	LSM	79
Nabeeha	20BCT0275	CSE3009	IoT	89

DELETING THE COLUMN:

```
SQL> delete from students where name='Nabeeha';
```

```
1 row deleted.
```

```
SQL> select * from students;
```

NAME	REG_NUMBER	COURSE_COD	SUBJECT	MARKS
Yogavarshni	20BCE2339	CSE3021	SIN	93
Kaaviya	20BEC0183	CSE2014	DSA	85
Shalini	20BCE0763	MGT1022	LSM	79

RETRIEIVING THE DATA:

```
SQL> select name from students where marks>80;
```

```
NAME
```

```
-----  
Yogavarshni  
Kaaviya
```

MYSQL TABLE CREATION AND JOINS:

TABLE 1 CREATION PRODUCT1:

```
SQL> create table product1(  
  2 ID integer primary key,  
  3 Product_name varchar2(10),  
  4 cost integer);  
  
Table created.
```

INSERT VALUES INTO TABLE1:

```
SQL> insert into product1 values(123,'Ear buds',2999);  
  
1 row created.  
  
SQL> insert into product1 values(4636,'Charger',1999);  
  
1 row created.  
  
SQL> insert into product1 values(234,'Battery',199);  
  
1 row created.  
  
SQL> insert into product1 values(979,'TV',49999);  
  
1 row created.  
  
SQL> insert into product1 values(2839,'iPhone14',89999);  
  
1 row created.
```

TABLE 1:

```
SQL> select * from product1;
```

ID	PRODUCT_NAME	COST
123	Ear buds	2999
4636	Charger	1999
234	Battery	199
979	TV	49999
2839	iPhone14	89999

TABLE 2 CREATION PRODUCT2:

```
SQL> create table product2(
  2  ID integer primary key,
  3  Product_name varchar2(10),
  4  cost integer);

Table created.
```

INSERT VALUES INTO TABLE2:

```
SQL> insert into product2 values(123,'Toys',899);

1 row created.

SQL> insert into product2 values(456,'HP-Lego',80000);

1 row created.

SQL> insert into product2 values(234,'Slime',359);

1 row created.

SQL> insert into product2 values(28,'Squishy',659);

1 row created.

SQL> insert into product2 values(095,'Books',1659);

1 row created.
```

TABLE 2:

```
SQL> select * from product2;
```

ID	PRODUCT_NA	COST
123	Toys	899
456	HP-Lego	80000
234	Slime	359
28	Squishy	659
95	Books	1659

INNER JOIN:

```
SQL> select * from product1 INNER JOIN product2 ON product1.ID=product2.ID;
```

ID	PRODUCT_NA	COST	ID	PRODUCT_NA	COST
123	Ear buds	2999	123	Toys	899
234	Battery	199	234	Slime	359

LEFT JOIN:

```
SQL> select * from product1 LEFT JOIN product2 ON product1.Product_name=product2.Product_name;
```

ID	PRODUCT_NA	COST	ID	PRODUCT_NA	COST
979	TV	49999			
4636	Charger	1999			
123	Ear buds	2999			
234	Battery	199			
2839	iPhone14	89999			

RIGHT JOIN:

```
SQL> select * from product1 RIGHT JOIN product2 ON product1.ID=product2.ID;
```

ID	PRODUCT_NA	COST	ID	PRODUCT_NA	COST
123	Ear buds	2999	123	Toys	899
234	Battery	199	234	Slime	359
			456	HP-Lego	80000
			28	Squishy	659
			95	Books	1659

FULL JOIN:

```
SQL> select * from product1 FULL JOIN product2 ON product1.ID=product2.ID where product2.cost>500;
```

ID	PRODUCT_NA	COST	ID	PRODUCT_NA	COST
123	Ear buds	2999	123	Toys	899
			456	HP-Lego	80000
			28	Squishy	659
			95	Books	1659

CROSS JOIN:

```
SQL> select * from product1 CROSS JOIN product2;
```

ID	PRODUCT_NAME	COST	ID	PRODUCT_NAME	COST
123	Ear buds	2999	123	Toys	899
123	Ear buds	2999	456	HP-Lego	80000
123	Ear buds	2999	234	Slime	359
123	Ear buds	2999	28	Squishy	659
123	Ear buds	2999	95	Books	1659
4636	Charger	1999	123	Toys	899
4636	Charger	1999	456	HP-Lego	80000
4636	Charger	1999	234	Slime	359
4636	Charger	1999	28	Squishy	659
4636	Charger	1999	95	Books	1659
234	Battery	199	123	Toys	899
234	Battery	199	456	HP-Lego	80000
234	Battery	199	234	Slime	359
234	Battery	199	28	Squishy	659
234	Battery	199	95	Books	1659
979	TV	49999	123	Toys	899
979	TV	49999	456	HP-Lego	80000
979	TV	49999	234	Slime	359
979	TV	49999	28	Squishy	659
979	TV	49999	95	Books	1659
2839	iPhone14	89999	123	Toys	899
2839	iPhone14	89999	456	HP-Lego	80000

MONGODB: CREATION, UPDATE, DELETION:

CREATE DATABASE:

```
students> use results;  
switched to db results
```

CREATE COLLECTION:

```
results> db.createCollection("Student");  
{ ok: 1 }  
results> show collections;  
Student
```

INSERTING INTO COLLECTION:

```
results> db.Student.insertMany([ { name: "Yogavarshni", reg_number: "20BCE2339", course_code: "CSE3009", marks: 90 }, { name: "Kaaviya", reg_number: "20BCE2755", course_code: "ECE3502", marks: 94 }, { name: "Nabeeha", reg_number: "20BCT0275", course_code: "BCT3009", marks: 85 }, { name: "Shalini", reg_number: "20BCE0763", course_code: "CSE3002", marks: 81 }])
```

```
results> db.Student.insertMany([ { name: "Yogavarshni", reg_number: "20BCE2339", course_code: "CSE3009", marks: 90 }, { name: "Kaaviya", reg_number: "20BCE2755", course_code: "ECE3502", marks: 94 }, { name: "Nabeeha", reg_number: "20BCT0275", course_code: "BCT3009", marks: 85 }, { name: "Shalini", reg_number: "20BCE0763", course_code: "CSE3002", marks: 81 }])
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId("647297c50cd0f3d283bfd268"),
    '1': ObjectId("647297c50cd0f3d283bfd269"),
    '2': ObjectId("647297c50cd0f3d283bfd26a"),
    '3': ObjectId("647297c50cd0f3d283bfd26b")
  }
}
```

```
results> db.Student.find().pretty();
[
  {
    _id: ObjectId("647297c50cd0f3d283bfd268"),
    name: 'Yogavarshni',
    reg_number: '20BCE2339',
    course_code: 'CSE3009',
    marks: 90
  },
  {
    _id: ObjectId("647297c50cd0f3d283bfd269"),
    name: 'Kaaviya',
    reg_number: '20BCE2755',
    course_code: 'ECE3502',
    marks: 94
  },
  {
    _id: ObjectId("647297c50cd0f3d283bfd26a"),
    name: 'Nabeeha',
    reg_number: '20BCT0275',
    course_code: 'BCT3009',
    marks: 85
  },
  {
    _id: ObjectId("647297c50cd0f3d283bfd26b"),
    name: 'Shalini',
    reg_number: '20BCE0763',
    course_code: 'CSE3002',
    marks: 81
  }
]
```

UPDATING COLLECTION:

```
results> db.Student.updateOne({name:"Kaaviya"},{$set:{reg_number:"20BEC0183"}});
```

```
results> db.Student.updateOne({name:"Kaaviya"},{$set:{reg_number:"20BEC0183"}});
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
```

```
results> db.Student.find().pretty();
[
  {
    _id: ObjectId("647297c50cd0f3d283bfd268"),
    name: 'Yogavarshni',
    reg_number: '20BCE2339',
    course_code: 'CSE3009',
    marks: 90
  },
  {
    _id: ObjectId("647297c50cd0f3d283bfd269"),
    name: 'Kaaviya',
    reg_number: '20BEC0183',
    course_code: 'ECE3502',
    marks: 94
  },
  {
    _id: ObjectId("647297c50cd0f3d283bfd26a"),
    name: 'Nabeeha',
    reg_number: '20BCT0275',
    course_code: 'BCT3009',
    marks: 85
  },
  {
    _id: ObjectId("647297c50cd0f3d283bfd26b"),
    name: 'Shalini',
    reg_number: '20BCE0763',
    course_code: 'CSE3002',
    marks: 81
  }
]
```


DELETING COLUMN:

results> db.Student.deleteOne({name:"Shalini"});

```
results> db.Student.deleteOne({name:"Shalini"});
{ acknowledged: true, deletedCount: 1 }
results> db.Student.find().pretty();
[
  {
    _id: ObjectId("647297c50cd0f3d283bfd268"),
    name: 'Yogavarshni',
    reg_number: '20BCE2339',
    course_code: 'CSE3009',
    marks: 90
  },
  {
    _id: ObjectId("647297c50cd0f3d283bfd269"),
    name: 'Kaaviya',
    reg_number: '20BEC0183',
    course_code: 'ECE3502',
    marks: 94
  },
  {
    _id: ObjectId("647297c50cd0f3d283bfd26a"),
    name: 'Nabeeha',
    reg_number: '20BCT0275',
    course_code: 'BCT3009',
    marks: 85
  }
]
```