

1. SELECT Statement

Format of a SELECT statement

```
SELECT [columnname] FROM [TABLENAME] WHERE [COLUMN-NAME] OPERATOR VALUE
```

```
SELECT Firstname FROM `1001` WHERE Hostel = 'Adegunwa'
```

```
SELECT FIrstname FROM `100 L` WHERE Religion = "ISLAM"
```

returns the matric number of students whose hostel is Adegunwa

```
SELECT matric_number FROM `100 level` WHERE Hostel='Adegunwa'
```

For selecting and returning all column names from the table

```
SELECT * FROM [tablename] WHERE [CRiteria]
```

2. DISTINCT

Returns only all the unique values in a specified field

```
SELECT DISTINCT [columnname] FROM [tablename]
```

3. ORDER BY

```
SELECT Firstname, Lastname, Roomnumber FROM `100 Level` ORDER BY Roomnumber;
```

For Descending order we write DESC

For example if we want to return all columns but sorted by Descending matric number

```
SELECT * FROM `100 level` ORDER BY MatricNumber DESC;
```

4. AND and OR

```
SELECT * FROM `100 level` WHERE Hostel = "Adegunwa" AND RoomName= "A2"
```

OR means either one of our condition is true

```
SELECT * FROM `100 level` WHERE Hostel_Name = "Adegunwa" OR Hostel_Name = "LUXURY";
```

Practice Question, Write an SQL Query which

1. Returns only the matric numbers of students who lives in adegunwa and lives in room 108

```
SELECT MatricNumber FROM `100 level` WHERE Hostel = "Adegunwa" AND ROOM = "108"
```

2. Returns the last name, first name, matric number of students but are ordered by their matric number in a descending order

```
SELECT Lastname,FirstName,MatricNumber FROM `100 level` ORDER BY MatricNumber DESC;
```

3. Return all the columns for students who are male and are in luxury hostel

```
SELECT * FROM `100 level` WHERE Gender ="Male" AND Hostel = "Luxury"
```

5. INSERT

To insert a new record into the table

```
INSERT INTO [tablename] (fieldname1,fieldname2) VALUES (valuefor1, valuefor2);
```

```
INSERT INTO `100 level`(`Matric_Number`, `First_Name`, `Last_Name`, `DOB`,  
`Gender`) VALUES ('FUO/22/0332','Roqeeb','Lawal','19/20/2009','Male')
```

A new record is now added to our table

Matric Number	First Name	Last Name	DOB	Gender
FUO/22/0332	Roqeed	Lawal	19/20/2009	Male

6. UPDATE

To Update a record to change the values of some fields

```
UPDATE [tablename] SET [fieldname] = 'newvalue', [fieldname2] = 'newvalue2'  
WHERE [Criteria of selection]
```

```
UPDATE `lecturers table` SET  
`Firstname`='James',`Secondname`='Ali',`Course`='Microbiology',`phonenumner`='23  
2323332' WHERE Firstname = "James";
```

Firstname	Secondname	Course	Phonenumber
James	Aliyu	Computer Science	2121221212

Changes to

Firstname	Secondname	Course	Phonenumber
James	Ali	Microbiology	232323332

7. DELETE

Delete a record from the table

```
DELETE FROM [tablename] WHERE [condition]
```

```
DELETE FROM `100 level` WHERE MatricNumber = "FU0/22/0678"
```

Deletes the record with the matric number fuo/22/0678 from the table