**Creating Models in Django:**

* SQL Lite presents in django which database we can use SQL Lite for medium scale applications.
* But in real time projects we can’t use because it is light weight SQL Lite.

**Example for creating a table in SQL Query:**

create table student(name varchar(100),fathername varchar(100),classname int,contact varchar(30));

**Steps to create Models:**

**1. Check database configurations in settings.py file in project folder.**

**2. Open models.py file in application folder at application level and define models (create a class for each model).**

from django.db import models

class student(models.Model):

**3. Attributes we have to define in that model**

from django.db import models

class student(models.Model):

name = models.CharField(max\_length=100)

fathername = models.CharField(max\_length=100)

classname = models.IntegerField()

contact = models.CharField(max\_length=100)

**Basic Field Types:**

1. AutoField ->Automatic increment used for integers

2. BigAutoField -> Big Integers

3. Boolean Field -> true or false

4. CharField -> String

5. DateField -> Date

6. DecimalField -> Double

7. DurationField -> Timestamp

8. FloatField -> Float

9. IntegerField -> Int

10. TextField -> Text

11. TimeField -> Time

**4. Run 2 commands**

makemigrations

migrate

**makemigrations command:**

python manage.py makemigrations

* When we execute that command 0001\_initial.py file will be created.
* To see what happen in the SQL point of view in the background of python manage.py makemigrations the command is

python manage.py sqlmigrate admissions 0001

**5) migrate command:**

python manage.py migrate

* admin,admissions,auth,contenttypes,sessions all files related to them will create by using above command.

All the Queries executes in database. This database we will set in settings.py file.

**To find how makemigrations and migrate have run:**

python manage.py shell

It will open the interactive console shell

* we have imported connection to connect databases(SQL Lite,MySQL)

from django.db import connection

cur=connection.cursor() #creating cursor object

cur.execute("select \* from admissions\_student")

res=cur.fetchall()

print(res)

After typing this above code it will shows the output in the list format

**o/p**:[]

To exit the interactive console shell **ctrl+z**