1) Creating Migrations

$ python manage.py makemigrations

$ python manage.py migrate

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2) Running migrations

$ python manage.py sqlmigrate [store] [0003]→ Acutal sql code for the migration [store] [0003]

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3) Customizing Database Schema

```python
class Customer(models.Model):
    MEMBERSHIP_BRONZE = 'B'
    MEMBERSHIP_SILVER = 'S'
    MEMBERSHIP_GOLD = 'G'

    MEMBERSHIP_CHOICES = [
        (MEMBERSHIP_BRONZE, 'Bronze'),
        (MEMBERSHIP_SILVER, 'Silver'),
        (MEMBERSHIP_GOLD, 'Gold'),
    ]
    first_name = models.CharField(max_length=255)
    last_name = models.CharField(max_length=255)
    email = models.EmailField(unique=True)
    phone = models.CharField(max_length=255)
    birth_date = models.DateField(null=True)
    membership = models.CharField(
        max_length=1, choices=MEMBERSHIP_CHOICES, default=MEMBERSHIP_BRONZE)

    def __str__(self) -> str:
        return f'{self.first_name} {self.last_name}'

    class Meta:
```

```
    db_table = 'store_customer'
    indexes = ['first_name', 'last_name']
    ordering = ['first_name', 'last_name']
```

----

4) Reverting Migrations
first step:
$ python manage.py migirate store 0002
second step:
$ rm 003.py(third migration file)
third step:
undo the changes that applied to the code

Better approach:
Use git version control system
$ git reset –hard Head~1
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5) Connecting to MYSQL

first → use datagrip to create a database schema
CREATE DATABASE storefront;

second → install related package for MYSQL
$ pipenv install mysqlclient

third → change our database settings.py

```
DATABASES = {
    'default': {
        'ENGINE': 'django.db.backends.mysql',
        'NAME': 'storefront',
        'HOST': 'localhost',
        'USER': 'root',
        'PASSWORD': 'Password Of Root'
    }
}
```

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5) Running Custom SQL

$ python manage.py makemigrations store –empty

change the migration file like below:
```
from django.db import migrations


class Migration(migrations.Migration):

    dependencies = [
        ('store', '0003_add_slug_to_product'),
    ]

    operations = [
        migrations.RunSQL("""
            INSERT INTO store_collection (title)
            VALUES ('collection1')
        """, """
            DELETE FROM store_collection
            WHERE title='collection1'
        """)
    ]
```