**#1 : Initializing environment and project**

*Create a virtual environment:*

```
conda create --name myEnv django
```

*Activate the virtual environment:*

```
conda activate myEnv
```

*Install Django in the virtual environment:*

```
conda install django
```

Initiate Django project:

```
django-admin startproject first_project
```

**#2: Making Django application**

*Initialize the application:*

```
cd first_project
```

make a new app named data_app:

```
python manage.py startapp data_app
```

**# 3: Connect Django Project to DBMS:**

Install pymysql client to enable connection to SQL:

```
import pymysql

pymysql.install_as_MySQLdb()
```

include this package in the init file of project This will instruct Django to use PyMySQL as the MySQL database backend.

In models.py define each and every table made:

```
from django.db import models

# myapp/models.py
# model = Table name
class Harvest(models.Model):
    #attribute names
    h_id = models.IntegerField(primary_key=True)
    date = models.DateField()
    quantity = models.IntegerField()
    plant_id = models.IntegerField()
    plot_id = models.IntegerField()
    member_id = models.IntegerField()

    def __str__(self):
        return f"Harvest {self.h_id}"
```

#4. Retrieve the data:

Make a view to handle data flow:

```
from django.shortcuts import render

# Create your views here.
# myapp/views.py

from django.http import JsonResponse
from .models import Harvest

def harvest_list(request):
    harvests = Harvest.objects.all().values()
    harvest_list = list(harvests)  # Convert QuerySet to a list for
JSON serialization
    return JsonResponse({'harvest': harvest_list})
```