1. Introduction to deploying Django projects to live servers like PythonAnywhere.

Ans. Deploying a Django project to a live server allows users to access it from anywhere on the internet. PythonAnywhere is a popular hosting platform that simplifies Django deployment without requiring server setup from scratch

**1. Steps to Deploy a Django Project on PythonAnywhere**

**Step 1: Prepare the Django Project for Deployment**

Before deployment, make sure the project is production-ready:

* **Update settings.py for production**
  + Set DEBUG = False to prevent security risks.
  + Add the live domain to ALLOWED\_HOSTS, e.g.:

ALLOWED\_HOSTS = ["your-username.pythonanywhere.com"]

* **Collect Static Files**  
  Run the following command to collect all static files:

python manage.py collectstatic

**Step 2: Create a PythonAnywhere Account**

* Sign up at [PythonAnywhere](https://www.pythonanywhere.com/).
* Log in and go to the **"Consoles"** section.

**Step 3: Upload the Django Project to PythonAnywhere**

You can upload your project using:

1. **GitHub**: If your project is on GitHub, clone it using:

git clone https://github.com/your-username/your-django-project.git

1. **SFTP (File Upload)**: Use the **PythonAnywhere file manager** to upload files manually.

**Step 4: Set Up a Virtual Environment**

Navigate to the project directory and create a virtual environment:

mkvirtualenv myenv --python=python3.9

Then install required dependencies:

pip install -r requirements.txt

**Step 5: Configure WSGI for Django**

* Go to the **"Web"** section in PythonAnywhere.
* Click **"Add a new web app"** → Choose **Django**.
* Edit the **WSGI configuration file** to point to your project.

import os

import sys

path = "/home/your-username/your-django-project"

if path not in sys.path:

sys.path.append(path)

os.environ.setdefault("DJANGO\_SETTINGS\_MODULE", "your\_project.settings")

from django.core.wsgi import get\_wsgi\_application

application = get\_wsgi\_application()

**Step 6: Configure the Database**

If using SQLite, ensure the database file is uploaded correctly.  
For MySQL or PostgreSQL, update settings.py with the correct database credentials.

**Step 7: Restart the Web App**

After configuring everything, restart your Django application from the **PythonAnywhere Web Dashboard**.

**2. Testing and Going Live**

* Open the assigned domain: your-username.pythonanywhere.com
* Check if the application is running correctly.