1. Why Django should be used for web-development? Explain how you can create a project in Django?

* Django is open source framework. It uses MVT(Models,Views,Templates) architecture. Simplifies development to a huge extent, provides inbuilt and up-to-date security features,suitable for any type of projects,enables rapid development,has dynamic CRUD interface.
* How to create Django:

1. Install Django

Pip install Django

1. Create a new project

Django-admin startproject mysite .

1. Create a new app

Django-admin startapp myapp

1. Create a database

Python manage.py migrate

1. Create views
2. Create temolates
3. Create urls.py
4. Run the server

Python manage.py runserver

1. How to check installed version of django?

Using Django manage.py

Python manage.py –version

1. Explain what does django-admin.py make messages command is used for?

The django-admin.py makemessages command is used in Django to extract translatable strings from your code and templates into message files. These message files are typically used for internationalization (i18n) and localization (l10n) of your Django applications.

The makemessages command is a crucial step in making your Django applicatio multilingual.

1. What is Django URLs?make program to create django urls

**Basic Structure of Django URLs**

* 1. **URL Patterns**: Defined in a list, typically in a file called urls.py. Each pattern is a mapping between a URL and a view function.
  2. **Views**: Functions or classes that handle the request and return a response.
  3. **Path Converter**: You can specify types of parameters in URLs, such as integers, slugs, etc.

Program to create Django Urls:

Django-admin startproject mysite .

Django-admin startapp myapp

Views.py:

def index(request)

return render(request,’index.html’)

def about(request)

return render(request,’about.html’)

myproject/urls.py:

from django.contrib import admin

from django.urls import path, include

urlpatterns = [

path('admin/', admin.site.urls),

path('', include('myapp.urls')),

]

Myapp/urls.py:

from django.urls import path

from .views import home, about

path('', views.index, name='index'),

path('about/',views. about, name='about'),

Run the server:

Python manage.py runserver

1. What is a QuerySet?Write program to create a new Post object in database:

A **QuerySet** in Django is a collection of database queries that allow you to retrieve, filter, and manipulate data from your database in a convenient way.

from django.db import models

class Post(models.Model):

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

content = models.TextField()

created\_at = models.DateTimeField(auto\_now\_add=True)

updated\_at = models.DateTimeField(auto\_now=True)

from django.shortcuts import redirect

from .models import Post

def create\_post(request):

if request.method == 'POST':

Post.objects.create(

title = request.POST['title']

content = request.POST['content']

)

Msg=’Object creates Successfully’

return render(request, 'create\_post.html',{‘msg’:msg})

else:

return render(request, 'create\_post.html')

1. Mention what command line can be used to load data into Django?

python manage.py loaddata <fixture\_name>

if fixture file name is ‘initial\_data.json’

Command to run is:

python manage.py loaddata initial\_data