

## Answer the following

### 1. What are views in Django? State the types of Views in Django.

Views in Django are Python functions or classes that receive web requests and return web responses. A view function controls what data is displayed and how it is presented to the user, usually via an HTML template.

Types of Views in Django:

#### 1. Function-Based Views (FBVs):

- These are views written as standard Python functions.
- Suitable for simple logic and straightforward handling of requests.

```
from django.http import HttpResponse
```

```
def my_view(request):  
    return HttpResponse("Hello, world!")
```

Class-Based Views (CBVs):

- These are views written using Python classes.
- They allow more modular, reusable, and extensible code by providing methods for handling HTTP verbs (get, post, etc.).

```
from django.views import View  
from django.http import HttpResponse
```

```
class MyView(View):  
    def get(self, request):  
        return HttpResponse("Hello from a class-based view!")
```

### 2. What is the difference between render() and redirect() functions in Django views?

Feature `render()` `redirect()`

Purpose Renders an HTML template with a context Redirects to another URL

Returns `HttpResponse` with the rendered template `HttpResponseRedirect` to a specific URL

Usage To display a page To navigate the user to a different route

Example `render(request, 'template.html', context)` `redirect('home')` or `redirect('/home/')`

3. You can pass URL parameters using the **URLconf (URL configuration)** and capture values with path converters or regular expressions.

**Example using `path()`:**

**How do you pass URL parameters to a Django view**

**# urls.py**

**from django.urls import path**

**from . import views**

**urlpatterns = [**

**path('article/<int:id>/', views.article\_detail, name='article\_detail'),**  
**]**

**# views.py**

**def article\_detail(request, id):**

**return HttpResponse(f"Article ID: {id}")**