

## What are Views in Django?

In Django, **views** handle requests and return responses. They define how data is processed and displayed to the user.

Example:

```
from django.http import HttpResponse

def home(request):
    return HttpResponse("Welcome to my blog!")
```

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## 2. Types of Views in Django

Django provides two types of views:

### A. Function-Based Views (FBVs)

These are simple Python functions that take a request and return a response.

Example:

```
from django.shortcuts import render

def home(request):
    return render(request, 'home.html')
```

### B. Class-Based Views (CBVs)

These use Python classes to define views and offer built-in functionality.

Example:

```
from django.views.generic import TemplateView

class HomeView(TemplateView):
    template_name = "home.html"
```

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## 3. Difference Between render() and redirect()

| Function          | Purpose  | Example   |
|-------------------|--|---|
| <b>render()</b>   | Renders an HTML template and returns an HTTP response. | <code>return render(request, 'home.html', {'data': 'Hello'})</code> |
| <b>redirect()</b> | Redirects to another URL or view.                      | <code>return redirect('home')</code>                                |

### Example Usage

```
from django.shortcuts import render, redirect
```

```
def my_view(request):
    if request.user.is_authenticated:
        return render(request, 'dashboard.html') # Loads the template
    else:
        return redirect('login') # Redirects to login page
```

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## 4. Passing URL Parameters to a Django View

You can pass parameters using **URL patterns** and capture them in views.

### A. Define URL Pattern (urls.py)

```
from django.urls import path
from .views import post_detail
```

```
urlpatterns = [
    path('post/<int:id>/', post_detail, name='post_detail'),
]
```

### B. Capture the Parameter in the View (views.py)

```
from django.shortcuts import render
from .models import Post
```

```
def post_detail(request, id):
    post = Post.objects.get(id=id)
```

```
return render(request, 'post_detail.html', {'post': post})
```