

## Lesson 06 Demo 02

### Accessing Variables in Jinja2

**Objective:** To access and process variables in Jinja2 for formatting, transforming data, and applying logic within templates

**Tools required:** Linux terminal

**Prerequisites:** None

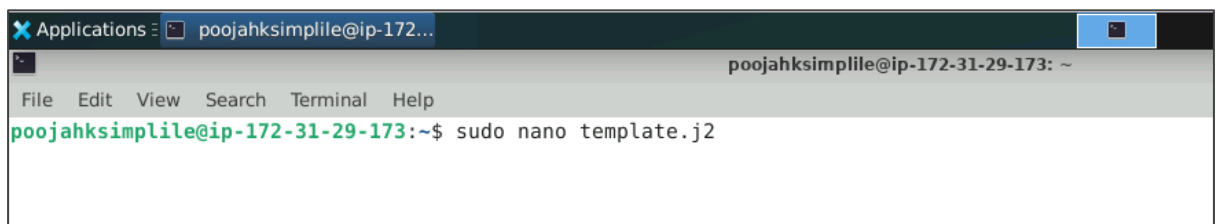
Steps to be followed:

1. Create a file and define the template
2. Load the Python script

#### Step 1: Create a file and define the template

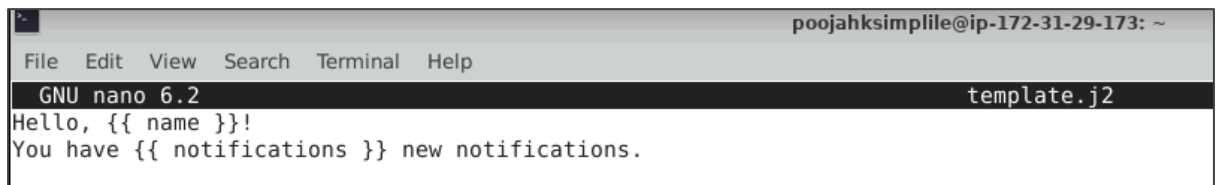
1.1 Run the following command to create a file:

**sudo nano template.j2**

A terminal window titled 'Applications' with a tab for 'poojahksimplile@ip-172...'. The terminal shows the command 'sudo nano template.j2' being entered at the prompt 'poojahksimplile@ip-172-31-29-173: ~\$'. The terminal has a menu bar with 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'.

1.2 Copy and paste the below script into the template.j2 file:

**Hello, {{ name }}!**  
**You have {{ notifications }} new notifications.**

A terminal window showing the 'nano' editor editing 'template.j2'. The editor title bar says 'GNU nano 6.2' and 'template.j2'. The content of the file is 'Hello, {{ name }}!' followed by 'You have {{ notifications }} new notifications.' on the next line. The terminal has a menu bar with 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'.

## Step 2: Load the Python script

2.1 Run the following command to create a new file:

**sudo nano render\_template.py**

```
poojahksimplile@ip-172-31-29-173:~$ sudo nano render_template.py
```

2.2 Copy and paste the below script into the template.j2 file:

**from jinja2 import Environment, FileSystemLoader**

**# Load the template from the file system**

**file\_loader = FileSystemLoader('.')**

**env = Environment(loader=file\_loader)**

**# Specify the template file**

**template = env.get\_template('template.j2')**

**# Define the variables**

**context = {**

**'name': 'ABCD',**

**'notifications': 5**

**}**

**# Render the template with the variables**

**output = template.render(context)**

**print(output)**

```
File Edit View Search Terminal Help
GNU nano 6.2 render_template.py *
from jinja2 import Environment, FileSystemLoader

# Load the template from the file system
file_loader = FileSystemLoader('.')
env = Environment(loader=file_loader)

# Specify the template file
template = env.get_template('template.j2')

# Define the variables
context = {
    'name': 'ABCD',
    'notifications': 5
}

# Render the template with the variables
output = template.render(context)

print(output)
```

2.3 Run the following command to execute the script:

**python render\_template.py**

```
poojahksimplile@ip-172-31-29-173:~$ python render_template.py
```

Below is the output after running the script:

```
poojahksimplile@ip-172-31-29-173:~$ python render_template.py
Hello, ABCD!
You have 5 new notifications.
poojahksimplile@ip-172-31-29-173:~$ █
```

By following these steps, you have successfully accessed and processed variables in Jinja2 for formatting, transforming data, and applying logic within templates.