

## Lesson 04 Demo 05

### Using YAML in Python for Data Serialization

**Objective:** To demonstrate how to use YAML in Python for data serialization, making data more readable and easier to manage

**Tools required:** Linux terminal

**Prerequisites:** None

Steps to be followed:

1. Create a Python script for data serialization using YAML
2. Run the serialization script

#### Step 1: Create a Python script for data serialization using YAML

1.1 Run the following command to create a Python file:

```
sudo nano serialize_simple.py
```

```
poojahksimplile@ip-172-31-36-118:~$ sudo nano serialize_simple.py
poojahksimplile@ip-172-31-36-118:~$
```

1.2 Add the Python script to serialize a dictionary into a YAML file in the `serialize_simple.py` file:

```
import yaml
```

```
# Step 2.1: Create a simple Python dictionary
```

```
data = {
    'title': 'YAML Serialization Example',
    'version': 1.0,
    'items': ['item1', 'item2', 'item3']
}
```

```
# Step 2.2: Serialize the dictionary to a YAML file
```

```
with open('example.yaml', 'w') as file:
```

```
    yaml.dump(data, file, default_flow_style=False)
```

```
print("Data has been serialized to 'example.yaml'")
```

```
GNU nano 6.2                                serialize_simple.py
import yaml

# Step 2.1: Create a simple Python dictionary
data = {
    'title': 'YAML Serialization Example',
    'version': 1.0,
    'items': ['item1', 'item2', 'item3']
}

# Step 2.2: Serialize the dictionary to a YAML file
with open('example.yaml', 'w') as file:
    yaml.dump(data, file, default_flow_style=False)

print("Data has been serialized to 'example.yaml'")
```

## Step 2: Run the serialization script

2.1 Use the following command to execute the Python file:

```
python serialize_simple.py
```

```
poojahksimplile@ip-172-31-36-118:~$ python serialize_simple.py
Data has been serialized to 'example.yaml'
poojahksimplile@ip-172-31-36-118:~$
```

By following these steps, you have successfully demonstrated how to use YAML in Python for data serialization, making data more readable and easier to manage.