Commands

```
# To create the virtual environment
python -m venv zenmlenv
```

```
# to activate the newly created v.env
.\zenmlenv\Scripts\activate.bat
```

or

```
cd zenmlenv
cd Scripts
activate.bat
```

```
# to check the installed libraries in the env
pip list
```

```
# to install ZenML library
pip install zenml
```

open Visual Studio code or any editor
create a test1.py file

```
# to initiate the ZenML
zenml init
```

```
# to load the ZenML
zenml up --blocking
```

```
#in case if prompted to installation run the command below
pip install "zenml[server]==0.74.0"
zenml up --blocking
```

```
# install necessary libraries to read file and perform a model building
pip install pandas
pip install scikit-learn
```

```
#to access the ZenML dashboard
http://127.0.0.1:8237
```

```
#in the activated virtual environment execute the code file
python test1.py
```

```
# execute with command line arguments or parameters
python test1.py mytext
```

```
# create seperate python files
```

load_data.py	Data Ingestion (contain STEPS to read the public url and store the data locally)
train_model.py	Model Building (contain STEPS to train the model, evaluate and intergrate MLFlow to track experiment)
train_pipeline.py	Contain PIPELINE to combine the STEPS
run_pipeline.py	to execute the pipeline

```
# execute with public url as a command line arguments or parameters
python run_pipeline.py https://raw.githubusercontent.com/nursnaaz/FutureDataScienceLegends/refs/heads/main/04.%20Linear%20Regression/Model%20Deployement/FastAPI/linear_regression_data.csv
```

ZenML Commands

```
# to initiate the ZenML
zenml init


# to load the ZenML
zenml up --blocking


# to see the list of all stack
zenml stack list


# to describe the active stack
zenml stack describe


# to register a stack and integrating with a MLFlow
zenml stack register my_mlflow_stack -a default -o default -e mlflow_experiment_tracker


# to set a stack as active
zenml stack set my_mlflow_stack
```