This file gives information about how the programs can be run:

TASK-1:

Task-1 is stored in a file called task1.py

It can be run from the terminal as follows:
->python3 ./task1.py

```
pp2data2 $python3 ./task1.py

  1. 100-10
  2. 100-100
  3. 1000-100
  4. crime
  5. wine
  6. challenge dataset

 Choose the number corresponding to the dataset you want to perform task-1 on:1
```

e.g.:

If you want to run it on 100-10 dataset, choose option 1.

TASK-2:

Task-2 is stored in a file called task2.py

It can be run by typing the following command in the terminal:

-> python3 ./task2.py

TASK-3.1:

Task-3.1 is stored in a file called task3_1.py
e.g.:

Enter the following command to run the file:
->python3 task3_1.py

```
pp2data2 $python3 ./task3_1.py

  1. 100-10
  2. 100-100
  3. 1000-100
  4. crime
  5. wine
  6. Challenge Dataset

Choose the number corresponding to the dataset you want to perform task-3.1 on:2
The best value of lambda would be: 18
Mean squared error on test set: 0.720278805652722
Time elapsed 3.200376033782959
```

Task-3.2:

Task-3.2 is stored in a file called task3_2.py

eg.:

Enter the following command to run the file.
->python3 ./task3_2.py

```
pp2data2 $python3 ./task3_2.py

 1. 100-10
 2. 100-100
 3. 1000-100
 4. crime
 5. wine
 6. Challenge Dataset

Choose the number corresponding to the dataset you want to perform task-1 on:5
Coverged in  17  iterations.
Alpha value has converged to: 6.163870473256464
Beta value has converged to: 1.6098093560143383
Lambda value has converged to: 3.828944371721967
Mean Squared Error on test set: 0.6267461050021639
Time elapsed:  0.009063959121704102
```