

To compile the code use below steps:

1. Copy all the .cpp files and .hpp files in a folder. In the terminal go to the folder where .cpp and .hpp files are copied and run the below command in linux terminal

```
g++ -g -Wall -Wno-deprecated -Werror -std=gnu++14 -  
I../include regression.hpp regression.cpp  
naviebayes.hpp naviebayes.cpp textsplit.hpp  
textsplits.cpp main.cpp
```

The above command creates a.out executable

To Run the executable:

Use below format to run the executable

```
./a.out -options train_data_folder test_data_folder
```

-options are below:

-mn Multinomial Navie Bayes

-bn Discrete Navie Bayes

-mlr Logistic regression with Bag of words

-blr Logistic regression with Bernouli model

-sdg generates csv files in the form of Bernoulli and Bag of words to run with python code present in the SDGClassifier folder

The options and three files must be given for the executable as command line arguments for all the algorithms.

Make sure that train and test folder contains ham and spam folder else the program won't run. Ex: ./a.out -mn hw2_train hw2_test