```
 1 /usr/local/bin/python3.12 /Users/robli/Documents/
   Undergraduate/Semester 5/MachineLearning/
   Assignment4/PretrainedEmbedding/
   PretrainedEmbeddings.py
 2 Filtered Training Data Shape: (36308, 3)
 3
 4 Filtered Validation Data Shape: (4548, 3)
 5
 6 Filtered Testing Data Shape: (4590, 3)
 7
 8 Sample from Training Data:
 9
   text  labels       id
10 0  My favourite food is anything I didn't have to
   ...       27  eebbqej
11 1  Now if he does off himself, everyone will thin
   ...       27  ed00q6i
12 2                    WHY THE FUCK IS BAYLESS
   ISOING       2  eezlygj
13 3                       To make her feel
   threatened       14  ed7ypvh
14 4                              Dirty Southern
   Wankers       3  ed0bdzj
15
16 Sample from Validation Data:
17
   text  labels       id
18 0  Is this in New Orleans?? I really feel like th
   ...       27  edgurhb
19 2            I've never been this sad in my life
   !     25  edcu99z
20 4  He could have easily taken a real camera from
   ...       20  eepig6r
21 5  Thank you for your vote of confidence, but we
   ...       15  eczm50f
22 6  Wah Mum other people call me on my bullshit an
   ...       2  ed4yr9r
23
24 Sample from Test Data:
25
   text  labels        id
```

```
26 0   I'm really sorry about your situation :( Altho
   ...          25   eecwqtt
27 1     It's wonderful because it's awful. At not with
   .           0   ed5f85d
28 2   Kings fan here, good luck to you guys! Will be
   ...          13   een27c3
29 3   I didn't know that, thank you for teaching me
    ...          15   eelgwd1
30 4   They got bored from haunting earth for thousan
   ...          27   eem5uti
31 Loading pretrained embeddings...
32 Embeddings loaded successfully!
33 Creating document embeddings...
34 Document embeddings created successfully!
35 Train Embeddings Shape: (36308, 100)
36 Validation Embeddings Shape: (4548, 100)
37 Test Embeddings Shape: (4590, 100)
38
39 Training Simple Regression (Logistic Regression)
   with class weights...
40 Simple Regression (Logistic Regression) with class
   weights Validation Accuracy: 0.1613896218117854
41 Simple Regression (Logistic Regression) with class
   weights Test Accuracy: 0.15773420479302833
42
43 Training Simple Regression (Logistic Regression)
   without class weights...
44 Simple Regression (Logistic Regression) without
   class weights Validation Accuracy: 0.
   39335971855760776
45 Simple Regression (Logistic Regression) without
   class weights Test Accuracy: 0.38758169934640524
46
47 Training Random Forest without class weights...
48 Random Forest without class weights Validation
   Accuracy: 0.3496042216358839
49 Random Forest without class weights Test Accuracy:
   0.34727668845315907
50
51 Training Random Forest with class weights...
52 Random Forest with class weights Validation
```

```
52 Accuracy: 0.3762093227792436
53 Random Forest with class weights Test Accuracy: 0.
   3836601307189543
54
55 Process finished with exit code 0
56
```