



CSCI 5408 – Data Management, Warehousing, Analytics

Assignment 5

Work done by,

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DECLARATION

I, Guturu Rama Mohan Vishnu, declare that in assignment 3 of CSCI 5408 course, I declare that all the work done was done by myself and I have not collaborated with anyone for the assignment.

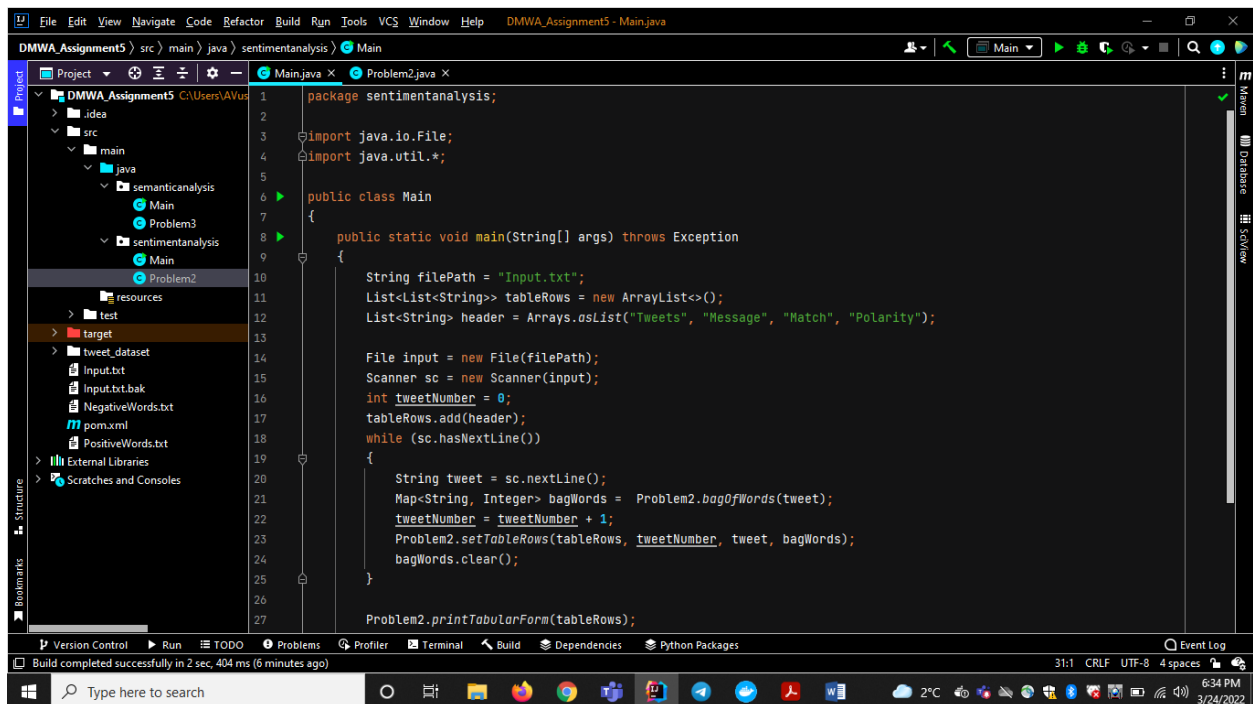
Problem #2

Sentiment Analysis

The code written for this program has been pushed to git repo :

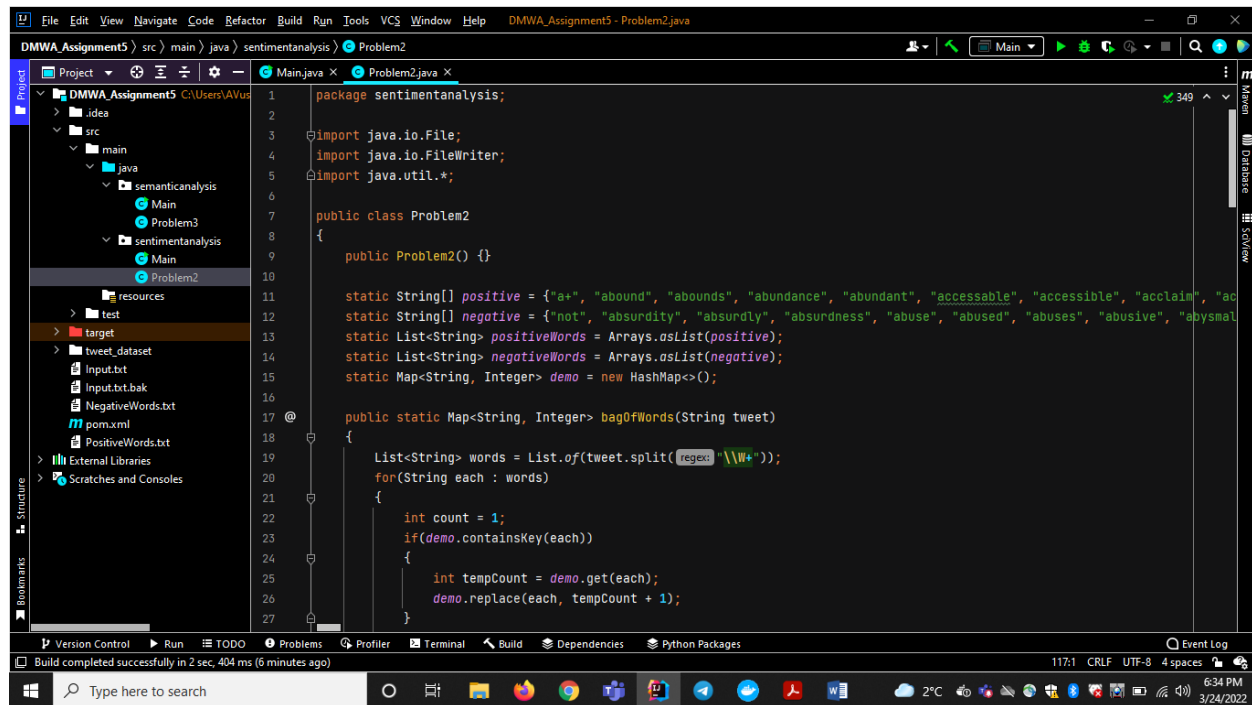
<https://git.cs.dal.ca/rguturu/csci-5408-w2022-b00871849-gutururamamohanvishnu/-/tree/main/assignment-5>

Screenshots of the code written for this program:



The screenshot shows an IDE window titled "DMWA_Assignment5 - Main.java". The code is written in Java and is part of a package named "sentimentanalysis". It imports "java.io.File" and "java.util.*". A public class "Main" contains a static method "main" that takes a "String[]" array of arguments and throws an "Exception". The code reads from a file named "Input.txt", processes each line as a tweet, and uses "Problem2" to analyze the sentiment. The results are stored in a table and printed at the end. The IDE interface includes a project explorer on the left showing the file structure, a central editor with line numbers, and a bottom status bar indicating the build was successful.

```
1 package sentimentanalysis;
2
3 import java.io.File;
4 import java.util.*;
5
6 public class Main
7 {
8     public static void main(String[] args) throws Exception
9     {
10         String filePath = "Input.txt";
11         List<List<String>> tableRows = new ArrayList<>();
12         List<String> header = Arrays.asList("Tweets", "Message", "Match", "Polarity");
13
14         File input = new File(filePath);
15         Scanner sc = new Scanner(input);
16         int tweetNumber = 0;
17         tableRows.add(header);
18         while (sc.hasNextLine())
19         {
20             String tweet = sc.nextLine();
21             Map<String, Integer> bagWords = Problem2.bagOfWords(tweet);
22             tweetNumber = tweetNumber + 1;
23             Problem2.setTableRows(tableRows, tweetNumber, tweet, bagWords);
24             bagWords.clear();
25         }
26
27         Problem2.printTabularForm(tableRows);
28     }
29 }
```



I am printing only 15 tweets and their required polarity on the console for validation purpose. Details of all the tweets are stored in a text file. Screenshots of the output printed on the console:

```
"C:\Program Files\Java\jdk-17.0.1\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2021.3.1\lib\idea_rt.jar=64583:C:\Program Files\JetBrains\IntelliJ IDEA 2021.3.1\bin" -Dfile.encoding=UTF-8 -classpath C:\Users\AVuser\IdeaProjects\DMWA_Assignments5\src\main\java\sentimentanalysis\Main.class  
Tweets Message  
1 its been feeling so good now its back cold wtf  
2 RT Caucasuswar: Poland will transfer all of its Mig-29 jets to the U.S.-run Ramstein Air Base in Germany for them to be sent to Ukraine.  
3 i love women and their cold rotted hearts  
4 sweet_tay_ If it wasnt cold I would  
5 Temperature: 15.60, Humidity: 51.20, THI: 59.52 now. Note: feel cold : Random Numbers:5695  
6 People want to know if this is gonna be a match No it's just gonna be Stone Cold whooping Kevin Owens ass  
7 The freezer is boring and cold thats bad af  
8 RT RyanResatka: Cold morning drives in Oregon  
9 RT ReidLybarger: abc27 NWSWPC On top of the heavy rain and flood potential, severe weather will also be possible. NWSWPC has issued a m  
10 RT tayredacted: Kevin Owens calling out Stone Cold for WrestleMania means its time to bring back the funniest story Ive ever heard in my
```

```
"C:\Program Files\Java\jdk-17.0.1\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA 2021.3.1\lib\idea_rt.jar=64583:C:\Program Files\JetBrains\IntelliJ IDEA 2021.3.1\bin" -Dfile.encoding=UTF-8 -classpath C:\Users\AVuser\IdeaProjects\DMWA_Assignments5\src\main\java\sentimentanalysis\Main.class  
Match Polarity  
cold. good. neutral  
tein Air Base in Germany for them to be sent to Ukraine. neutral  
love. cold. neutral  
cold. negative  
om Numbers:5695 cold. negative  
whooping Kevin Owens ass Cold. negative  
bad. cold. boring. negative  
Cold. negative  
re weather will also be possible. NWSWPC has issued a m top. severe. neutral  
me to bring back the funniest story Ive ever heard in my Cold. negative
```

```
5      Temperature: 15.60, Humidity: 51.20, THI: 59.52 now.  Note: feel cold : Random Numbers:5695
6      People want to know if this is gonna be a match No it's just gonna be Stone Cold whooping Kevin Owens ass
7      The freezer is boring and cold thats bad af
8      RT RyanResatka: Cold morning drives in Oregon
9      RT ReidLybarger: abc27 NWSWPC On top of the heavy rain and flood potential, severe weather will also be possible. NWSWPC has issued a m
10     RT tayredacted: Kevin Owens calling out Stone Cold for WrestleMania means its time to bring back the funniest story Ive ever heard in my
11     RT 97_olenici: You know you made it when your ice cold bear NFT from PlayColony gets rendered in 3D, thank you hunterbessell and zenwav
12     Anyone could get hot or cold regardless of if Kyrie plays or not, that's the beauty of the league my boy
13     RT omfgWAVY: can softness and brutal honesty coexist. thats what ive been searching for. spaces that dont turn cold when uncomfortable
14     RT SportsCenter: Stone Cold is returning to the ring for WrestleMania

Process finished with exit code 0
```

bers:5695	cold.	negative
ing Kevin Owens ass	Cold.	negative
	bad. cold. boring.	negative
	Cold.	negative
ther will also be possible. NWSWPC has issued a m	top. severe.	neutral
bring back the funniest story Ive ever heard in my	Cold.	negative
endered in 3D, thank you hunterbessell and zenwav	cold. thank.	neutral
the league my boy	beauty. cold. hot. not.	neutral
r. spaces that dont turn cold when uncomfortable	cold. honesty. brutal. uncomfortable.	negative
	Cold.	negative

All tweets and details are stored in “Problem2_output.txt” file. Screenshot of the output file generated for Problem 2:

```
1 |Tweets|Message|Match|Polarity
2 |its been feeling so good now its back cold wtf|cold. good. |neutral
3 |RT Caucasuswar: Poland will transfer all of its Mig-29 jets to the U.S.-run Ramstein Air Base in Germany for them to be sent to Ukraine.||neutral
4 |I love women and their cold rosted hearts|love. cold. |neutral
5 |sweet_tay_ If it wasnt cold I would|cold. |negative
6 |Temperature: 15.60, Humidity: 51.20, THI: 59.52 now. Note: feel cold : Random Numbers:5695|cold. |negative
7 |People want to know if this is gonna be a match No it's just gonna be Stone Cold whooping Kevin Owens ass|Cold. |negative
8 |The freezer is boring and cold thats bad af |bad. cold. boring. |negative
9 |RT RyanResatka: Cold morning drives in Oregon |Cold. |negative
10 |RT ReidLybarger: abc27 NWSWPC On top of the heavy rain and flood potential, severe weather will also be possible. NWSSPC has issued a m|top. severe. |neutral
11 |RT tayredacted: Kevin Owens calling out Stone Cold for WrestleMania means its time to bring back the funniest story Ive ever heard in my|Cold. |negative
12 |RT 97_olenici: You know you made it when your ice cold bear NFT from PlayColony gets rendered in 3D, thank you hunterbessell and zenwav|cold. thank. |neutral
13 |Anyone could get hot or cold regardless of if Kyrie plays or not, that's the beauty of the league my boy |beauty. cold. hot. not. |neutral
14 |RT omfgWAVY: can softness and brutal honesty coexist. thats what ive been searching for. spaces that dont turn cold when uncomfortable|cold. honesty.
brutal. uncomfortable. |negative
15 |RT SportsCenter: Stone Cold is returning to the ring for WrestleMania|Cold. |negative
16 |RT BRWrestling: GIVE ME A HELL YEAH. Stone Cold has accepted KOs WrestleMania 38 invitation via WWE |HELL. Cold. |negative
17 |Thursday, March 17 10 am PST 6PM GMT Save your spot here 33 |neutral
18 |RT PippaCrerar: McDonalds closing its restaurants in Russia and pausing operations as result of Ukraine invasion is deeply symbolic. The||neutral
19 |War is peace Freedom is slavery Hot is Cold |Freedom. Cold. Hot. peace. |positive
20 |Backpainandwine The way things are going were heading back to the 70's. An 80's child 80's music is more my thing. The only thing we had to worry about
back then was rising costs and the cold war with Russia. Oh , I'll go back to listening to Duran Duran...|cold. worry. |negative
21 |RT SportsCenter: Stone Cold is returning to the ring for WrestleMania |Cold. |negative
22 |RT Depheruk: When you arrive at a property amp you are faced with the reality of neglect by the system. Today's visits 89 year old: No he|neglect.
|negative
23 |I could never be a hoe simply because I am in fact always cold|cold. |negative
24 |My latest story for MedillChicago is out I took a look at how homeless people are being forced to seek shelter on the CTA due to the cold weather. |cold.
|negative
25 |RT PippaCrerar: McDonalds closing its restaurants in Russia and pausing operations as result of Ukraine invasion is deeply symbolic. The||neutral
26 |RT timfarron: IanDunt Exactly. Worse than the end of the Cold War though, because then they had all these huge state owned industries tha|Cold. Worse.
|negative
27 |RT Jon trickett: Britains two biggest energy companies are making profits of 4.5 million per hour. 1 person in the UK dies every hour d|dies. |negative
28 |KarineM1969 CTVNews Due to people wearing masks in public and social distancing cold flu season was greatly reduced. Som countries it is common practice to
wear a mask when you are sick|cold. sick. |negative
29 |RT NeilMacFarquhar: Very sad day for the history of nytimes in Moscow. Pulling all its correspondents out of the country. We have had rep|sad. |negative
30 |RT PippaCrerar: McDonalds closing its restaurants in Russia and pausing operations as result of Ukraine invasion is deeply symbolic. The||neutral
31 |RT amazingatheist: Bush is president Anti-LGBT Fervor 911 War Economy Collapses Wall Street Bailout Obama is President Wars continue GA|Fervor. |positive
32 |RT GrolarBearsins: Agent B was feeling very tired, it was such of a hot dav, luckv for him turnouts Agent G office had a special super col|lucky. hot.
```

Normal text file length: 674,342 lines: 3,427 Ln: 1 Col: 1 Pos: 1 Unix (LF) UTF-8 INS

Type here to search 1°C 6:45 PM 3/24/2022