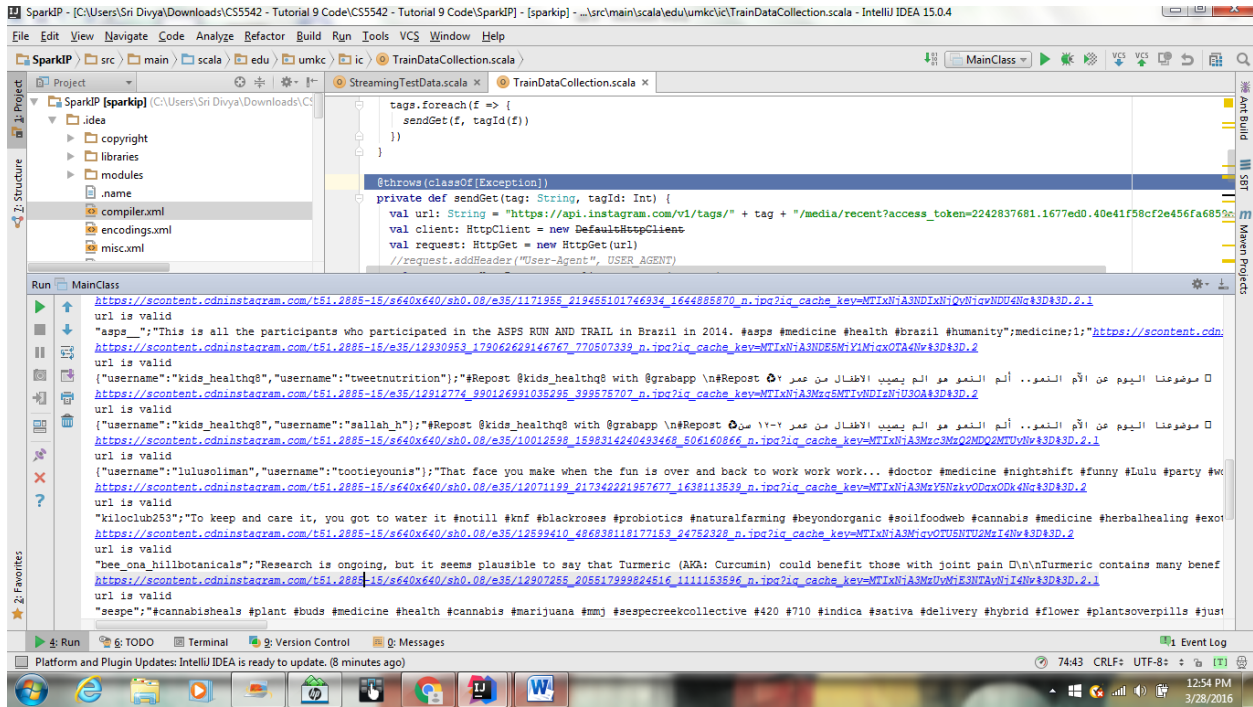


## Lab 9 Report

### Question1:

Image collection and sentimental analysis based on image tags using instagram streaming:

Image collection using the keywords “medicine” “heart” “fitness”.



```
tags.foreach(f => {
  sendGet(f, tagId(f))
})

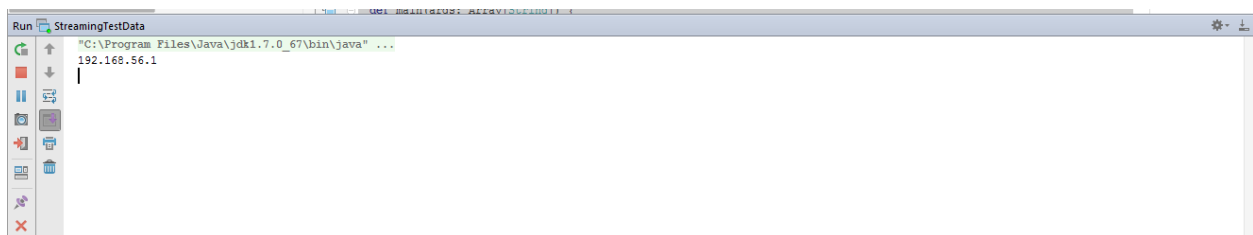
@throws(classOf[Exception])
private def sendGet(tag: String, tagId: Int) {
  val url: String = "https://api.instagram.com/v1/tags/" + tag + "/media/recent?access_token=2242837681.1677e00.40e41f58cf2e456fa685%3A"
  val client: HttpClient = new DefaultHttpClient()
  val request: HttpGet = new HttpGet(url)
  //request.addHeader("User-Agent", "USER_AGENT")
}
```

Run MainClass

```
https://content.cdninstagram.com/t51.2885-15/s640x640/sh0.08/e35/1171955_219455101746934_1644885870_n.jpg?ig_cache_key=MTIxNjA3NDIxNjQyNjQvNDU4NjA3NDk3D.2.1
url is valid
"asps_": "This is all the participants who participated in the ASPS RUN AND TRAIL in Brazil in 2014. #asps #medicine #health #brazil #humanity": "https://content.cdninstagram.com/t51.2885-15/s640x640/sh0.08/e35/12930953_178062629146767_770807339_n.jpg?ig_cache_key=MTIxNjA3NDk3D.2.1
url is valid
{"username": "kids_healthq8", "username": "tweetnutrition"}: "#Repost @kids_healthq8 with @grabapp \n#Repost ٥ موضوعنا اليوم عن الآم النمو.. أتم النمو هو الم يصيب الاطفال من عمر ١٢-٧
https://content.cdninstagram.com/t51.2885-15/s640x640/sh0.08/e35/12912774_990124991035295_399875707_n.jpg?ig_cache_key=MTIxNjA3NDk3D.2.1
url is valid
{"username": "kids_healthq8", "username": "sallah_h"}: "#Repost @kids_healthq8 with @grabapp \n#Repost ٥ موضوعنا اليوم عن الآم النمو.. أتم النمو هو الم يصيب الاطفال من عمر ١٢-٧
https://content.cdninstagram.com/t51.2885-15/s640x640/sh0.08/e35/12071199_217342221957677_1638113539_n.jpg?ig_cache_key=MTIxNjA3NDk3D.2.1
url is valid
{"username": "lulusoliman", "username": "tootieyounis"}: "That face you make when the fun is over and back to work work work... #doctor #medicine #nightshift #funny #Lulu #party #wc
https://content.cdninstagram.com/t51.2885-15/s640x640/sh0.08/e35/12071199_217342221957677_1638113539_n.jpg?ig_cache_key=MTIxNjA3NDk3D.2.1
url is valid
"kiloclub253": "To keep and care it, you got to water it #notill #knf #blackroses #probiotics #naturalferming #beyondorganic #soilfoodweb #cannabis #medicine #herbalhealing #exot
https://content.cdninstagram.com/t51.2885-15/s640x640/sh0.08/e35/12939410_486838118177183_24752328_n.jpg?ig_cache_key=MTIxNjA3NDk3D.2.1
url is valid
"bee_ons_hillbotanicals": "Research is ongoing, but it seems plausible to say that Turmeric (AKA: Curcumin) could benefit those with joint pain D\nturmeric contains many benef
https://content.cdninstagram.com/t51.2885-15/s640x640/sh0.08/e35/12907255_205517899824516_1111153596_n.jpg?ig_cache_key=MTIxNjA3NDk3D.2.1
url is valid
"seape": "#cannabisheals #plant #buds #medicine #health #cannabis #marijuana #mmj #seepcreekcollective #420 #710 #indica #sativa #delivery #hybrid #flower #plantsoverpills #just
```

Training dataset :

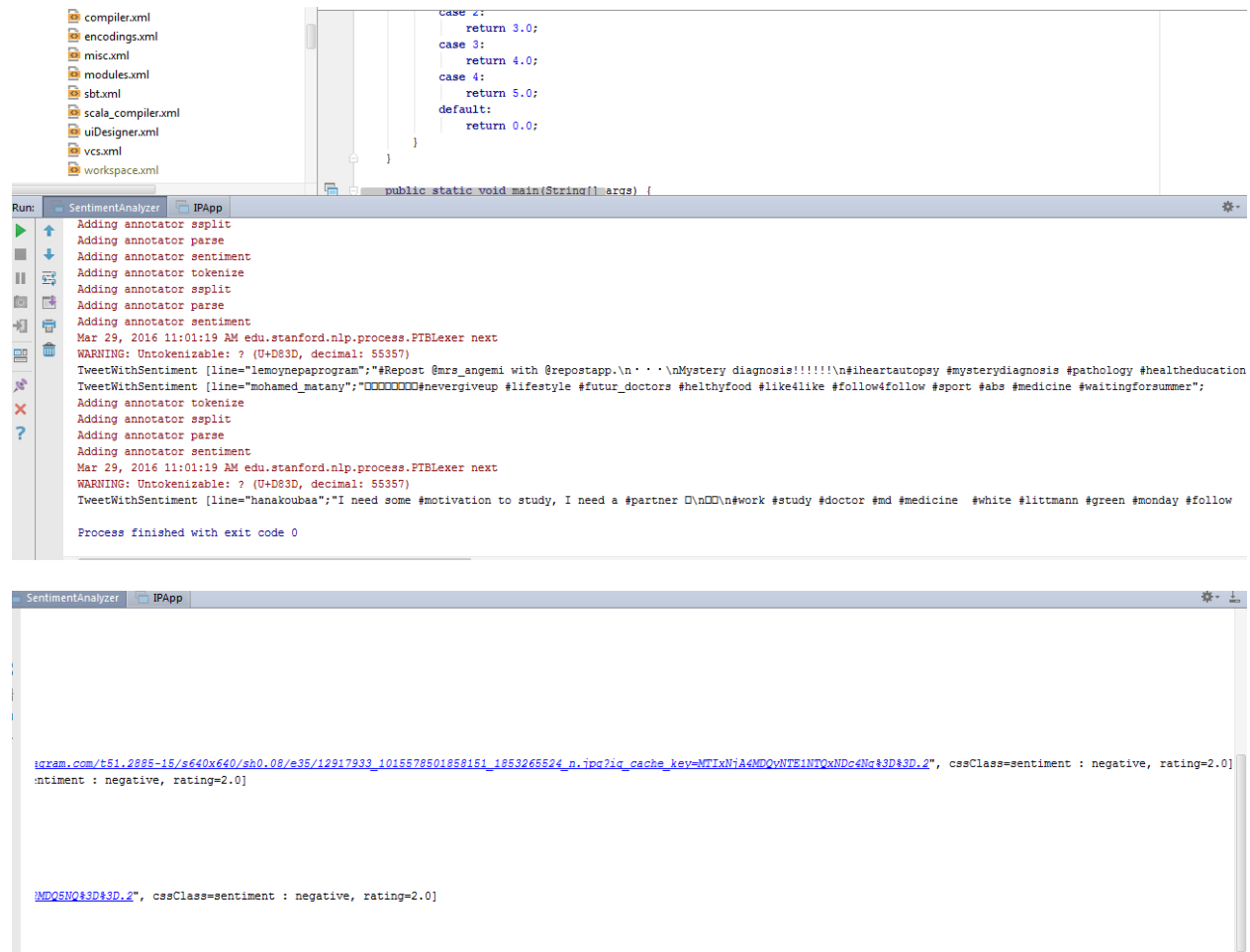
With the particular IP address collected the testing data.



```
Run StreamingTestData
"C:\Program Files\Java\jdk1.7.0_67\bin\java" ...
192.168.56.1
```

## Sentimental analysis:

Performed sentiment analysis on the image tags collected and the results are as shown.



The image shows a screenshot of an IDE with a project named 'SentimentAnalyzer'. The project structure on the left includes files like compiler.xml, encodings.xml, misc.xml, modules.xml, sbt.xml, scala\_compiler.xml, uiDesigner.xml, vcs.xml, and workspace.xml. The main editor displays a Scala code snippet for a sentiment analysis function:

```
case 2:
  return 3.0;
case 3:
  return 4.0;
case 4:
  return 5.0;
default:
  return 0.0;
}

public static void main(String[] args) {
```

The Run console shows the execution of the application. It lists the addition of various annotators (ssplit, parse, sentiment, tokenize) and displays the results of sentiment analysis on several tweets. The results are as follows:

```
Mar 29, 2016 11:01:19 AM edu.stanford.nlp.process.PTBLexer next
WARNING: Untokenizable: ? (U+D83D, decimal: 55357)
TweetWithSentiment [line="lemoynepaprogram";"#Repost @mrs_angemi with @repostapp.\n...\nMystery diagnosis!!!!!!\n#heartautopsy #mysterydiagnosis #pathology #healtheducation
TweetWithSentiment [line="mohamed_matany";"XXXXXXXX#nevergiveup #lifestyle #futur_doctors #helthyfood #like4like #follow4follow #sport #abs #medicine #waitingforsummer";
Adding annotator tokenize
Adding annotator ssplit
Adding annotator parse
Adding annotator sentiment
Mar 29, 2016 11:01:19 AM edu.stanford.nlp.process.PTBLexer next
WARNING: Untokenizable: ? (U+D83D, decimal: 55357)
TweetWithSentiment [line="hanakoubaa";"I need some #motivation to study, I need a #partner \n\nwork #study #doctor #md #medicine #white #littmann #green #monday #follow

Process finished with exit code 0
```

The bottom screenshot shows the output of the sentiment analysis in the Run console, displaying the sentiment and rating for specific tweets:

```
igram.com/t51.2885-15/s640x640/sh0.08/e35/12917933_1015878501858151_1853265524_n.jpg?ig_cache_key=WTIXNIA4MDQvNTE1NTQxNDc4Ng%3D%3D.2", cssClass=sentiment : negative, rating=2.0]
ntiment : negative, rating=2.0]

MDQSNQ%3D%3D.2", cssClass=sentiment : negative, rating=2.0]
```

## Question2:

Image classification based on categories related to project.

Collected images of different categories medicine, heart and fitness related to our project.

Icon	Name	Date/Time	Type	Size
Folder	fitness	3/28/2016 5:04 PM	File folder	
Folder	hospitals	3/28/2016 1:02 PM	File folder	
Folder	medicine	3/28/2016 1:02 PM	File folder	
Document	recommendation	3/28/2016 1:02 PM	Text Document	59 KB

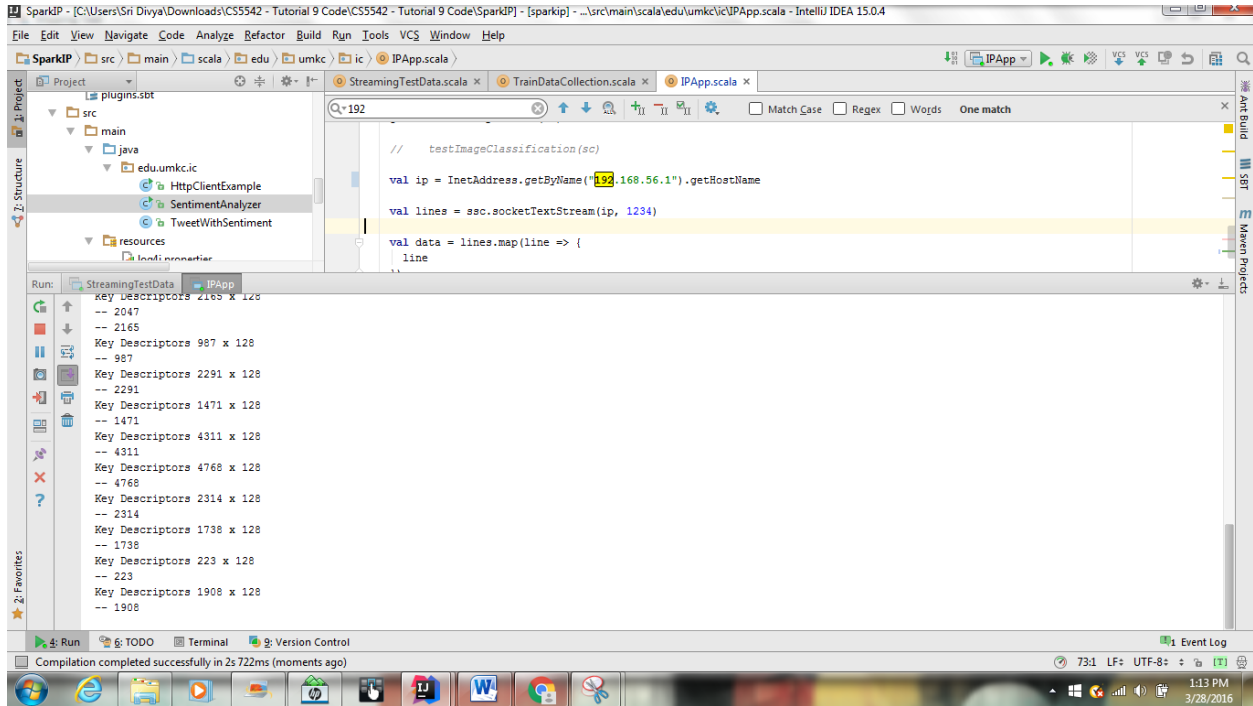
1 2 3 4 5 6 7 8 9 10 11

12 13 14 15 16 17 18 19 20 21 22

23 24 25 26 27 28 29 30 31 32 33

### Question 3:

Image based recommendation system:



Question 4:

Instagram trend notification to smart watch

