## **Cloud Computing MiniProject 1 Report**

Ruoxi Zhang ruz39@pitt.edu Kenny Wu kew143@pitt.edu Zhanghaoxiang Yin zhy77@pitt.edu

### Part 3. Ngram results:

We used all .xml files in /etc/hadoop as the input.

```
student@CC-MON-31:~/hadoop$ hdfs dfs -cat ngram_output/*
2020-02-14 20:32:10,083 INFO sasl.SaslDataTransferClient: SA
         5
1
1
         1
21
         1
8
"ASI
         9
9
9
5
"BAS
"Lic
"UTF
"ali
         21
"clu
         4
5
"con
"enc
"hre
"mea
         21
         1 4
"ofa
"tex
         2
1
%use
'she
         1
1
9
1
'tex
(ASF
(roo
(the
);yo
         1
21
) und
*"me
*,/h
*</v
         42
+20=
,/ho
,CLA
, CPU
         1
5
9
1
, HAD
,Ver
,[us
         1
,aft
, and
         21
9
2
1
, bob
,eit
,for
, nex
         9
10
,sof
, the
,u:%
         15
,use
, whe
         21
         5
,whi
,wil
 -KM
         5
 -Pu
```

#### Part 4.

#### Problem 1.

How many hits were made to the website item "/assets/img/home-logo.png"?

```
[student@CC-MON-31:~/hadoop$ hdfs dfs -cat output1/*
2020-02-14 22:16:18,865 INFO sasl.SaslDataTransferCli
/assets/img/home-logo.png 98744
```

98744 hits were made to "/assets/img/home-logo.png".

#### Problem 2.

How many hits were made from the IP: 10.153.239.5?

```
[student@CC-MON-31:~/hadoop$ hdfs dfs -cat output2/* 2020-02-14 22:17:00,465 INFO sasl.SaslDataTransferCl 10.153.239.5 547
```

547 hits were made from IP: 10.153.239.5.

#### Problem 3.

Which path in the website has been hit most? How many hits were made to the path?

```
[student@CC-MON-31:~/hadoop$ hdfs dfs -cat output3/*
2020-02-14 20:03:59,387 INFO sasl.SaslDataTransferCl
"GET 26
/ 99303
/assets/css/combined.css 117348
```

"/assets/css/combined.css" has been hit most in the website. 117348 hits were made to this path.

# Problem 4. Which IP accesses the website most? How many accesses were made by it?

```
[student@CC-MON-31:~/hadoop$ hdfs dfs -cat output4/*
2020-02-14 20:11:31,013 INFO sasl.SaslDataTransferC
10.1.1.113
                1
10.1.1.125
                12
                14
10.1.100.183
10.1.100.199
                35
10.1.109.54
                44
10.1.11.81
                69
10.1.12.172
                93
10.1.122.130
                109
10.1.146.91
                321
10.1.181.142
               10686
10.102.126.202 12298
10.104.62.79
                14807
10.118.250.30
               18282
10.169.128.121 22516
10.173.141.213 47503
10.216.113.172 158614
```

10.216.113.172 accesses the website most. 158614 accesses were made by it.