# Digital Forensics - Lab 2

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| Class No : | **CH2021221000516** | Slot : | **L49 + L50** |
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## Question 1 :

***Download and install Microsoft's Log Parser tool for the Windows environment from Microsoft's Web Site.***

***Read the examples and take screenshots by running three different commands that work***

For this experiment, I have used a windows 7 installed in a virtual machine. I have installed the required log parser version 2.2 from the Microsoft website. Using this I have obtained the outputs as shown below. I have first navigated to the folder where the log parser software is present, and then we execute the commands specified below.

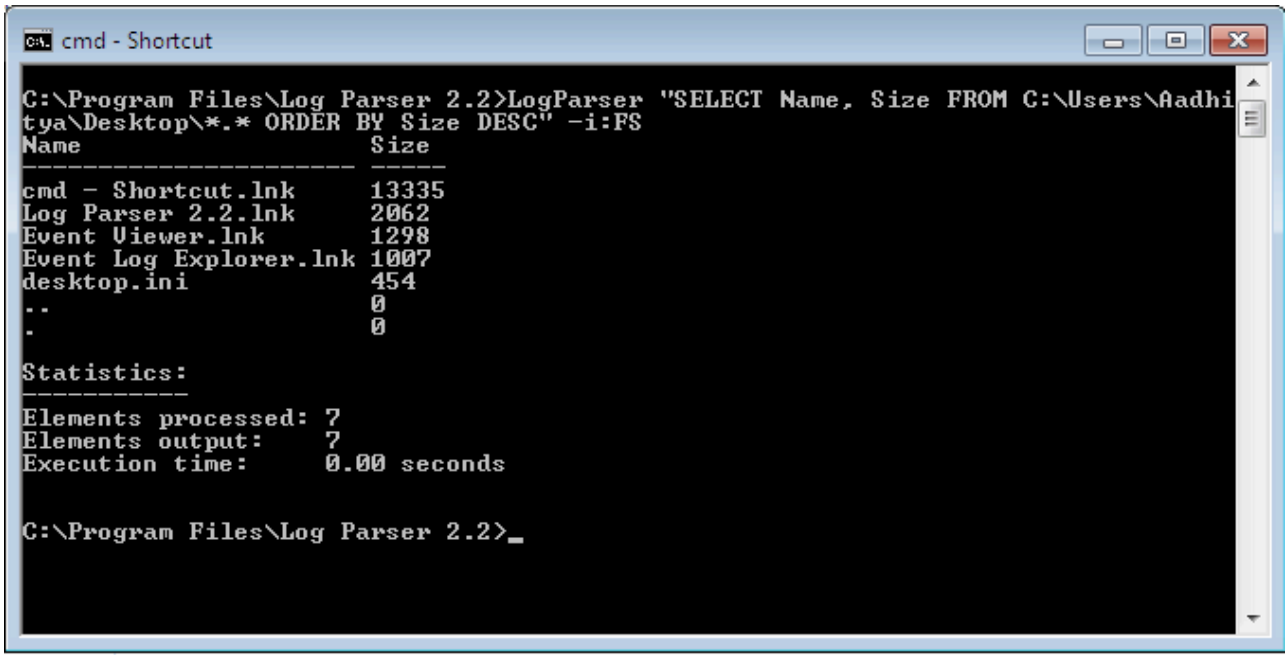
I have tried a few commands and have tried different versions of the same too, I have explained each and have shown the output of each.

## A. Display the contents of the Desktop folder

In order to do this we, design the query as follows :

*LogParser "SELECT Name, Size FROM C:\Users\UserName\Desktop*.* ORDER BY Size DESC" -i:FS*

We have displayed the name and size of the contents of the desktop folder, I have also ordered the files by their size in descending order. The output I have received when executed is as follows :

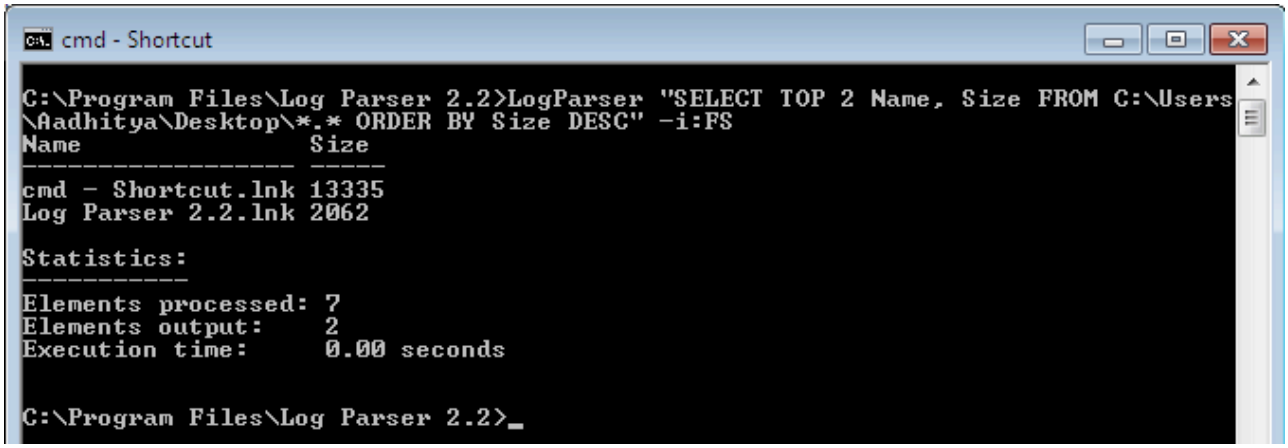



## B. Display the 2 largest files in the Desktop folder

In order to do this we, design the query as follows :

*LogParser "SELECT TOP 2 Name, Size FROM C:\Users\UserName\Desktop*.* ORDER BY Size DESC" -i:FS*

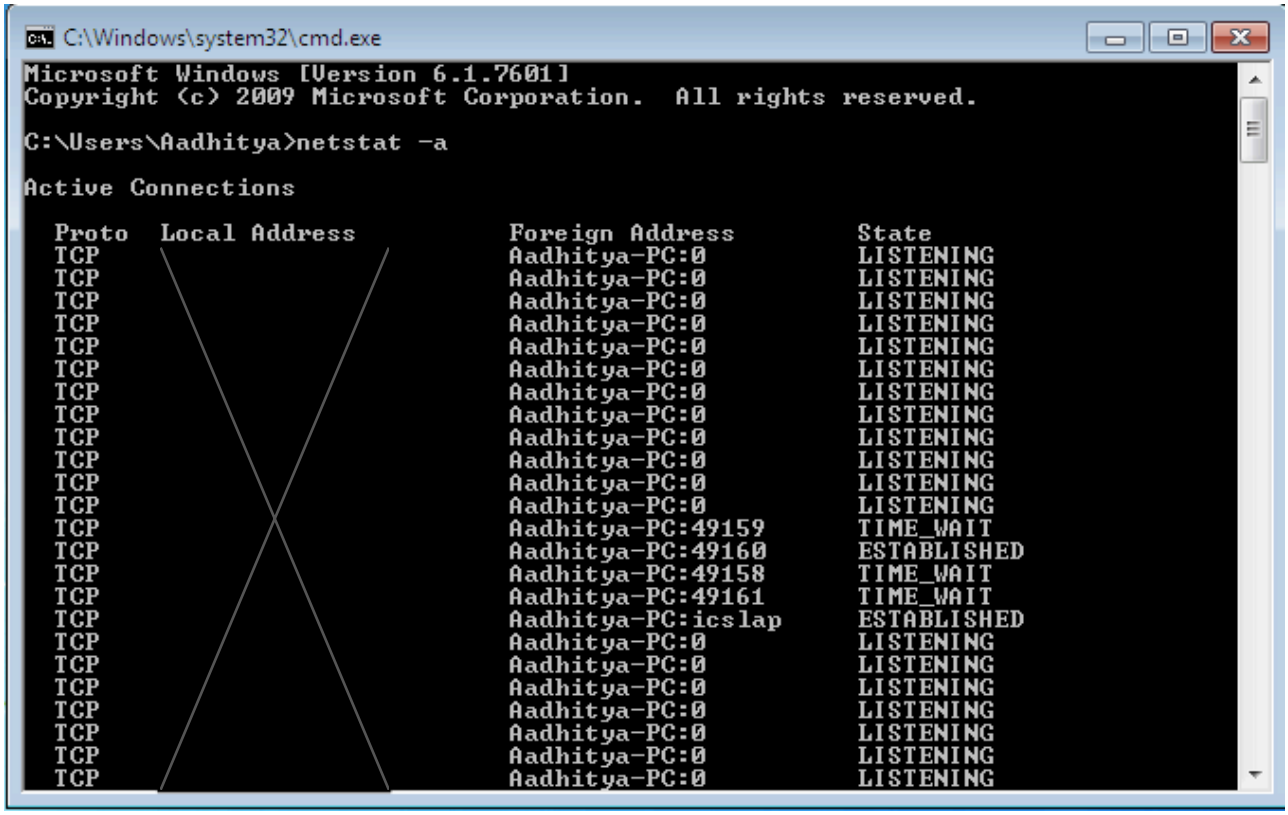
We have displayed the name and size of the two largest files in the desktop folder, I have also ordered the files by their size in descending order. The output I have received when executed is as follows :



## C. Display all the currently listening Network ports

In order to create a log parser query for this, we redirect the output of the "**netstat**" command to the log parser query.

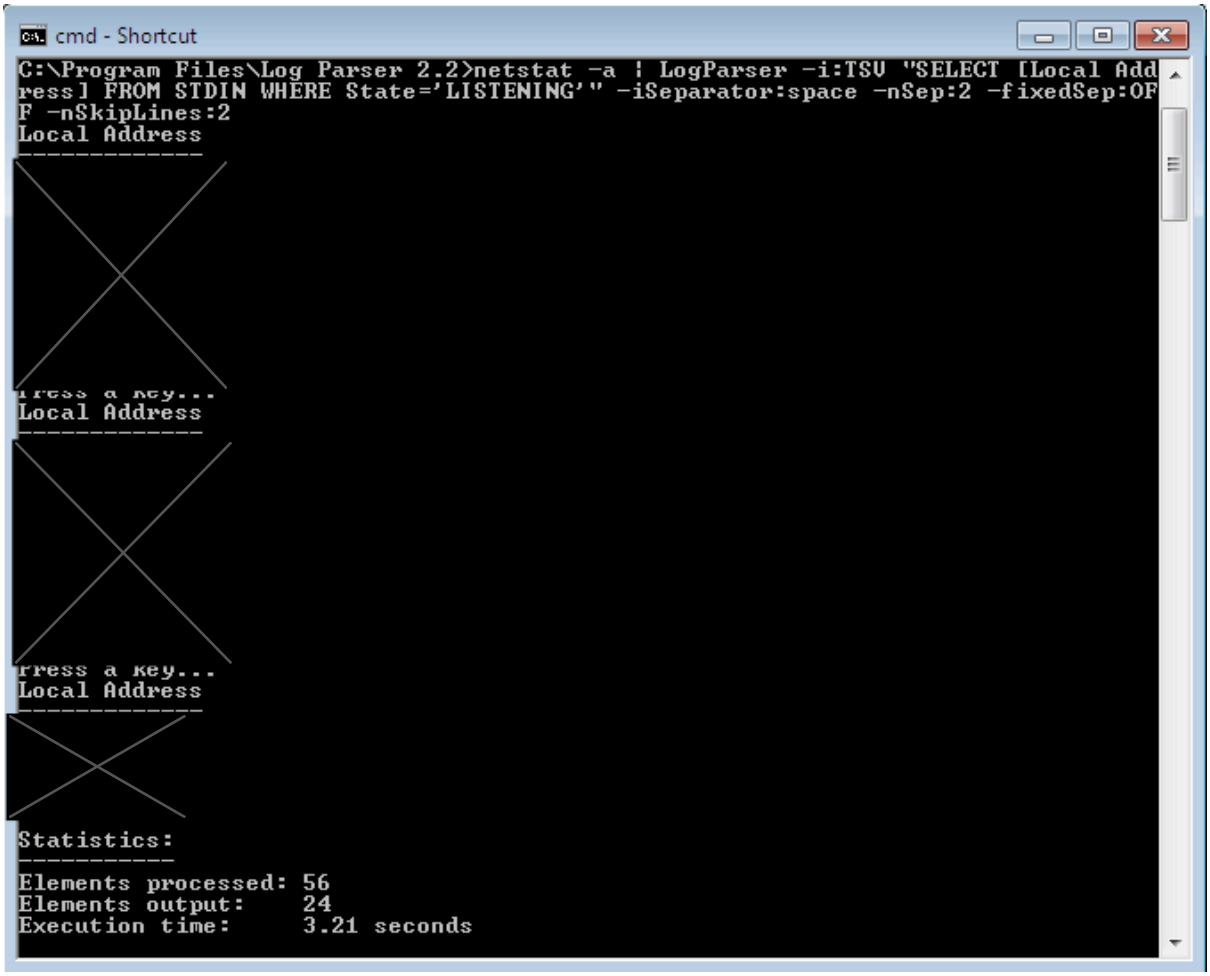
The "**netstat**" command is used to display all the open network ports. An example output of this command is as follows :




We can notice that the state denotes the state of the port, we will use this in our query, we will divert the output into the log parser using the pipeline command. The final log parser query is as follows :

*netstat -a | LogParser -i:TSV "SELECT * FROM STDIN WHERE State='LISTENING'"*
*-iSeperator:space -nSep:2 -fixedSep:OFF -nSkipLines:2*


cmd - Shortcut
C:\Program Files\Log Parser 2.2>netstat -a | LogParser -i:TSV "SELECT * FROM STDIN WHERE State='LISTENING'" -iSeparator:space -nSep:2 -fixedSep:OFF -nSkipLines:2
Filename RowNumber Proto Local Address Foreign Address State
STDIN 5 TCP Aadhitya-PC:0 LISTENING
STDIN 6 TCP Aadhitya-PC:0 LISTENING
STDIN 7 TCP Aadhitya-PC:0 LISTENING
STDIN 8 TCP Aadhitya-PC:0 LISTENING
STDIN 9 TCP Aadhitya-PC:0 LISTENING
STDIN 10 TCP Aadhitya-PC:0 LISTENING
STDIN 11 TCP Aadhitya-PC:0 LISTENING
STDIN 12 TCP Aadhitya-PC:0 LISTENING
STDIN 13 TCP Aadhitya-PC:0 LISTENING
STDIN 14 TCP Aadhitya-PC:0 LISTENING
Press a key...
Filename RowNumber Proto Local Address Foreign Address State
STDIN 15 TCP Aadhitya-PC:0 LISTENING
STDIN 16 TCP Aadhitya-PC:0 LISTENING
STDIN 17 TCP Aadhitya-PC:0 LISTENING
STDIN 18 TCP Aadhitya-PC:0 LISTENING
STDIN 19 TCP Aadhitya-PC:0 LISTENING
STDIN 20 TCP Aadhitya-PC:0 LISTENING
STDIN 21 TCP Aadhitya-PC:0 LISTENING
STDIN 22 TCP Aadhitya-PC:0 LISTENING
STDIN 23 TCP Aadhitya-PC:0 LISTENING
STDIN 24 TCP Aadhitya-PC:0 LISTENING
Press a key...
Filename RowNumber Proto Local Address Foreign Address State
STDIN 25 TCP Aadhitya-PC:0 LISTENING
STDIN 26 TCP Aadhitya-PC:0 LISTENING
STDIN 27 TCP Aadhitya-PC:0 LISTENING
STDIN 28 TCP Aadhitya-PC:0 LISTENING
Statistics:
Elements processed: 56
Elements output: 24
Execution time: 2.13 seconds

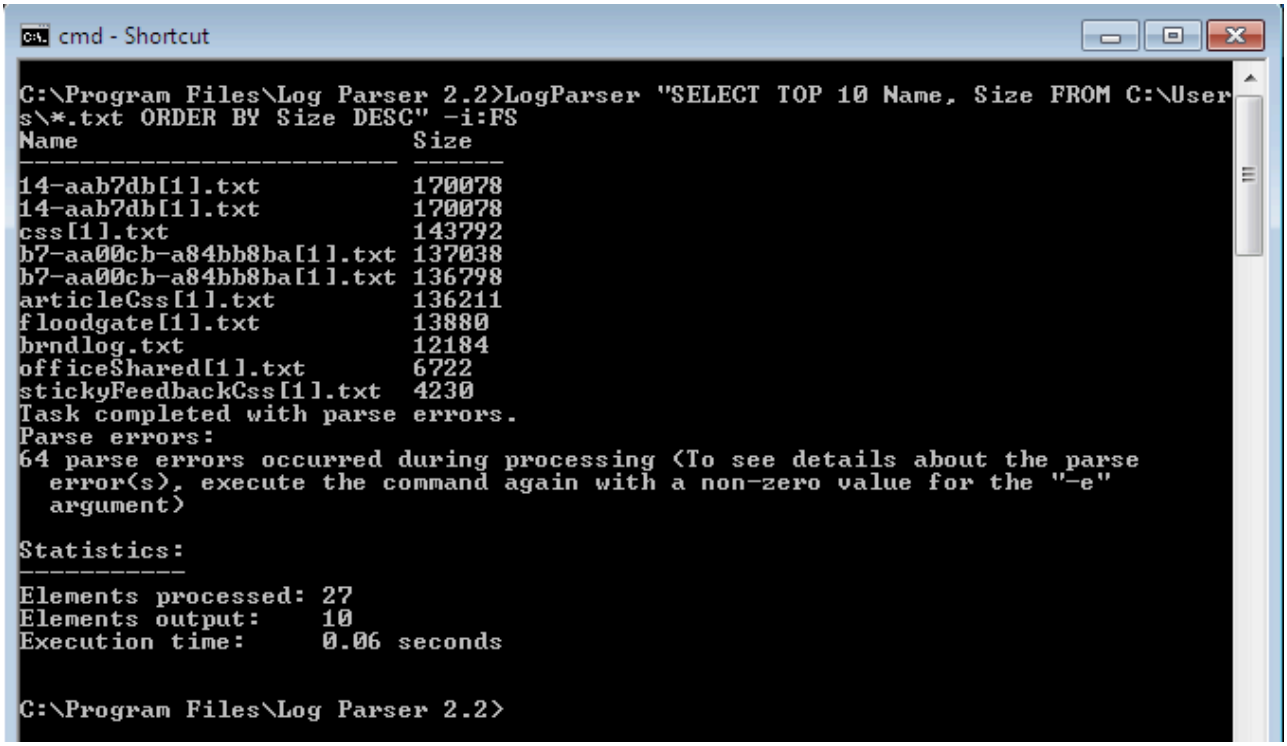

cmd - Shortcut
C:\Program Files\Log Parser 2.2>netstat -a | LogParser -i:TSV "SELECT [Local Address] FROM STDIN WHERE State='LISTENING'" -iSeparator:space -nSep:2 -fixedSep:OFF -nSkipLines:2
Local Address
Local Address
Local Address
Statistics:
Elements processed: 56
Elements output: 24
Execution time: 3.21 seconds

## D. Display the 10 largest text files from the users folder in windows C drive

In order to do this we, design the query as follows :

*LogParser "SELECT TOP 10 Name, Size FROM C:\Users*.txt ORDER BY Size DESC" -i:FS*

We have displayed the name and size of the ten largest text files in the Users folder, I have also ordered the files by their size in descending order. Notice that text file have an extension of ".txt", we have used this property to filter out the text files. The output I have received when executed is as follows :

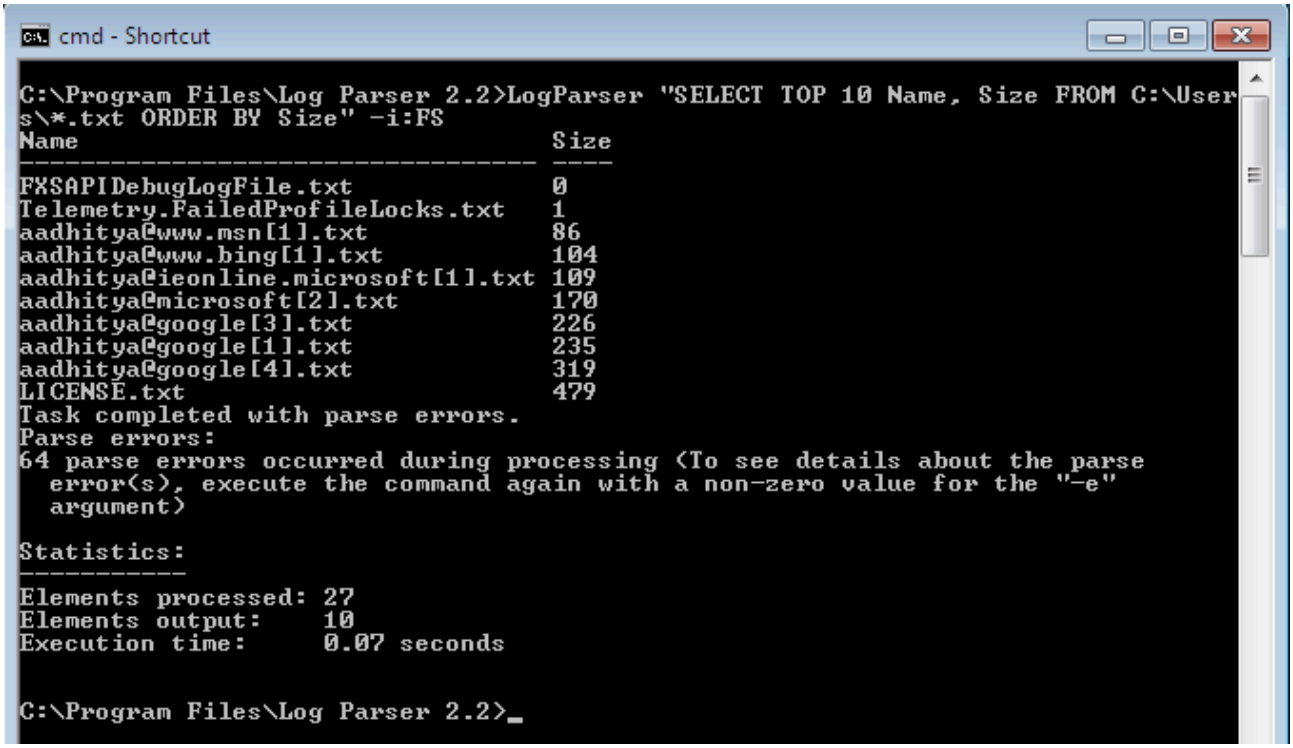



## E. Display the 10 smallest text files from the users folder in windows C drive

In order to do this we, design the query as follows :

*LogParser "SELECT TOP 10 Name, Size FROM C:\Users*.txt ORDER BY Size" -i:FS*

We have displayed the name and size of the ten smallest text files in the Users folder, I have also ordered the files by their size in descending order. Notice that text file have an extension of ".txt", we have used this property to filter out the text files. The output I have received when executed is as follows :




## CONCLUSION

We have in this experiment, performed many forensic analysis on the hard disk folders using Microsoft's Log Parser Tool, like knowing the top 10 largest or smallest files, or to use the log parser tool for higher purposes by redirecting the output of other commands to this, like finding the network ports with a particular status, etc.