

MP 1 report Group 73

First we use scp to upload log file to VM: scp vm1.log [kaiqi3@fa18-cs425-g73-01.cs.illinois.edu:/home/kaiqi3/vm1.log](mailto:kaiqi3@fa18-cs425-g73-01.cs.illinois.edu)

Part 1:

We use grep4j to implement our design.

For each vm log, we create a profile.

The local profile is:

```
Profile localProfile = ProfileBuilder.newBuilder().name("Local server log").filePath("/home/zli104/vm1.log").onLocalhost().build();
```

The remote profile is:

```
Profile remoteProfile_2 = ProfileBuilder.newBuilder().name("Remote server log2").filePath("/home/zli104/vm2.log").onRemoteHost("fa18-cs425-g73-02.cs.illinois.edu").credentials("zli104", "Lzrgueen1996").build();
```

Then use grep command to search patterns in all logs and return results..

```
String str = "<the pattern for grep>" ;
GrepResults results = grep(constantExpression(str), on(localProfile, remoteProfile_2, remoteProfile_3, remoteProfile_4, remoteProfile_5, remoteProfile_6, remoteProfile_7, remoteProfile_8, remoteProfile_9, remoteProfile_10));
```

Result is:

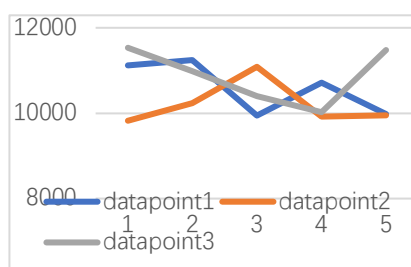
```
Total lines found : 71
Total Execution Time : 10045
/home/zli104/vm1.log
line found : 7
execution time: 9564
/home/zli104/vm2.log
line found : 7
execution time: 9564
/home/zli104/vm3.log
line found : 7
execution time: 10038
/home/zli104/vm4.log
line found : 7
execution time: 9564
/home/zli104/vm5.log
line found : 7
execution time: 9564
```

Part 2:

We test the grep command to other VMs separately on each VM to check whether each VM can work properly. Then we can implement our formal grepping of log files.

Use assertThat to judge whether the results are correct:

```
assertThat(executing(results).totalLines(), is(70));
```



the plot for five total execution time trials of

three data points is:

The average execution time is 10597.6, 10453.5, 10694.3,
the standard variation is 614.5, 604.3, 610.7.