

CSC3100 Assignment 1 Test Instructions

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Step 1. Log in the server with “ssh -p 61000 [username]@10.26.1.65” or “ssh -p 61001 [username]@10.26.1.65”. Replace [username] with your user account.

```
[liwenye@localhost ~]$ ssh -p 61000 liwenye@10.26.1.65
liwenye@10.26.1.65's password:
Welcome to Ubuntu 20.04.3 LTS (GNU/Linux 5.4.0-72-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Tue Oct 12 10:36:44 UTC 2021

System load:      0.03      Temperature:      36.0 C
Usage of /home:   unknown   Processes:        56
Memory usage:     1%       Users logged in:  2
Swap usage:       0%       IPv4 address for eth0: 10.27.161.55

 * Super-optimized for small spaces - read how we shrank the memory
   footprint of MicroK8s to make it the smallest full K8s around.

https://ubuntu.com/blog/microk8s-memory-optimisation

5 updates can be applied immediately.
To see these additional updates run: apt list --upgradable

Last login: Mon Oct 11 05:59:36 2021 from 127.0.0.1
liwenye@ds01:~$
```

Step 2. Create a directory called “assignment1” with “mkdir assignment1”.

```
liwenye@ds01:~$ cd ~/
liwenye@ds01:~$ pwd
/home/liwenye
liwenye@ds01:~$ mkdir assignment1
liwenye@ds01:~$ ls -l
total 1
drwxrwxr-x 2 liwenye liwenye 2 Oct 12 11:31 assignment1
liwenye@ds01:~$
```

Step 3. Change your working directory to `assignment1` with “`cd assignment1/`”.

Copy your assignment files into `assignment1` directory.

Check your files with “`ls -l`”.

```
liwenye@ds01:~$ cd assignment1/
liwenye@ds01:~/assignment1$ ls -l
total 15
-rw-rw-r-- 1 liwenye liwenye 282 Oct 12 11:23 MathExpr.java
-rw-rw-r-- 1 liwenye liwenye 869 Oct 12 11:23 TestMathExpr.java
-rw-rw-r-- 1 liwenye liwenye 53 Oct 12 11:23 inputA.txt
-rw-rw-r-- 1 liwenye liwenye 180 Oct 12 11:23 inputB.txt
-rw-rw-r-- 1 liwenye liwenye 15 Oct 12 11:23 outputA.txt
-rw-rw-r-- 1 liwenye liwenye 39 Oct 12 11:23 outputB.txt
liwenye@ds01:~/assignment1$
```

Step 4. Compile your java source code with “`javac MathExpr.java`” and “`javac TestMathExpr.java`”.

If the compilation is successful, you will see the “.class” files.

```
liwenye@ds01:~/assignment1$ javac MathExpr.java
liwenye@ds01:~/assignment1$ javac TestMathExpr.java
liwenye@ds01:~/assignment1$ ls -l
total 24
-rw-rw-r-- 1 liwenye liwenye 262 Oct 12 11:24 MathExpr.class
-rw-rw-r-- 1 liwenye liwenye 282 Oct 12 11:23 MathExpr.java
-rw-rw-r-- 1 liwenye liwenye 1201 Oct 12 11:24 TestMathExpr.class
-rw-rw-r-- 1 liwenye liwenye 869 Oct 12 11:23 TestMathExpr.java
-rw-rw-r-- 1 liwenye liwenye 53 Oct 12 11:23 inputA.txt
-rw-rw-r-- 1 liwenye liwenye 180 Oct 12 11:23 inputB.txt
-rw-rw-r-- 1 liwenye liwenye 15 Oct 12 11:23 outputA.txt
-rw-rw-r-- 1 liwenye liwenye 39 Oct 12 11:23 outputB.txt
liwenye@ds01:~/assignment1$
```

Step 5. Execute your program with “`java TestMathExpr inputA.txt output.txt`”, where `inputA.txt` is a text file of input mathematical expressions, and `output.txt` is the output file of results.

```
liwenye@ds01:~/assignment1$ java TestMathExpr inputA.txt output.txt
liwenye@ds01:~/assignment1$ ls -l
total 25
-rw-rw-r-- 1 liwenye liwenye 262 Oct 12 11:24 MathExpr.class
-rw-rw-r-- 1 liwenye liwenye 282 Oct 12 11:23 MathExpr.java
-rw-rw-r-- 1 liwenye liwenye 1201 Oct 12 11:24 TestMathExpr.class
-rw-rw-r-- 1 liwenye liwenye 869 Oct 12 11:23 TestMathExpr.java
-rw-rw-r-- 1 liwenye liwenye 53 Oct 12 11:23 inputA.txt
-rw-rw-r-- 1 liwenye liwenye 180 Oct 12 11:23 inputB.txt
-rw-rw-r-- 1 liwenye liwenye 11 Oct 12 11:25 output.txt
-rw-rw-r-- 1 liwenye liwenye 15 Oct 12 11:23 outputA.txt
-rw-rw-r-- 1 liwenye liwenye 39 Oct 12 11:23 outputB.txt
liwenye@ds01:~/assignment1$
```

Step 6. Compare your results with the solution with “`cmp output.txt outputA.txt`”, where `output.txt` is the output file from your program and `outputA.txt` is the answer file.

If the two files are the same, there will be no output.

```
liwenye@ds01:~/assignment1$ cmp output.txt outputA.txt
liwenye@ds01:~/assignment1$
```

If the two files are different, messages will be shown which gives the first difference encountered.

```
liwenye@ds01:~/assignment1$ cmp output.txt outputA.txt
output.txt outputA.txt differ: byte 1, line 1
liwenye@ds01:~/assignment1$
```

Finished.