

### Compiling and Execution

The program was compiled and tested using GCC Version 4.4.7 20120313 (Red Hat 4.4.7-4) on a CIRCE terminal running Scientific Linux v6.3.

To compile, use either of the following commands:

```
make  
gcc -Wall -o ass1 ass1.c
```

Then run the program by executing “ass1.”

```
./ass1
```

Running in the aforementioned environment, no errors or warnings are received upon compiling the program.

### Performance

Running the program within the Linux ‘time’ command can provide some analysis of the performance of the program.

```
time ./ass1  
.  
.  
.  
real    0m0.006s  
user    0m0.006s  
sys     0m0.002s
```

From this, we can determine that the program used about 0.008s of CPU time, since the ‘user’ and ‘sys’ labels refer to the time spent outside (user mode) and inside (kernel mode) the kernel, respectively. The ‘real’ label simply indicates the amount of time from the beginning to the end of the program call, including time used by other processes or when the processes running were blocked.