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CSC220 -- Activity 7
2017-06-26

Part 1

Sample Output

```
faysal@DESKTOP-AOGE5FF:/mnt/c/Users/faysa/Dropbox/School/CSC220/Activity7$ ./gcd a 5 2> error.txt
faysal@DESKTOP-AOGE5FF:/mnt/c/Users/faysa/Dropbox/School/CSC220/Activity7$ ./gcd 8 50
2
faysal@DESKTOP-AOGE5FF:/mnt/c/Users/faysa/Dropbox/School/CSC220/Activity7$ ./gcd 9 54
9
faysal@DESKTOP-AOGE5FF:/mnt/c/Users/faysa/Dropbox/School/CSC220/Activity7$ cat error.txt
Non-numeric parameters.
faysal@DESKTOP-AOGE5FF:/mnt/c/Users/faysa/Dropbox/School/CSC220/Activity7$ ./gcd 2 2> error.txt
faysal@DESKTOP-AOGE5FF:/mnt/c/Users/faysa/Dropbox/School/CSC220/Activity7$ cat error.txt
Invalid number of parameters.
faysal@DESKTOP-AOGE5FF:/mnt/c/Users/faysa/Dropbox/School/CSC220/Activity7$
```

Compilation

```
gcc -c gcd.c -ansi -Wall -pedantic
gcc -c activity7.c  -ansi -Wall -pedantic
gcc gcd.o activity7.o -o gcd
```

gcd.h

```
/*
   This file contains gcd() header.
*/

int gcd(int x, int y);
```

activity7.c

```
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include "gcd.h"

int x;
int y;

int main(int argc, char **argv) {
  if (argc != 3) {
    fprintf (stderr, "Invalid number of parameters.\n");
    return 0;
  }
  else {
    x = atoi(argv[1]);
    y = atoi(argv[2]);
    if ( (x == 0) || (y == 0) ) {
      fprintf (stderr, "Non-numeric parameters.\n");
      return 0;
    }
    else {
      fprintf (stdout, "%d\n", gcd(x, y));
```

```
        return gcd(x, y);
    }
  }
}
```

Part 2 - Makefile

```
all: gcd
      gcc -c gcd.c -ansi -Wall -pedantic
      gcc -c activity7.c  -ansi -Wall -pedantic
      gcc gcd.o activity7.o -o gcd
```

```
faysal@DESKTOP-AOGE5FF:/mnt/c/Users/faysa/Dropbox/School/CSC220/Activity7$ make
gcc -c gcd.c -ansi -Wall -pedantic
gcc -c activity7.c  -ansi -Wall -pedantic
gcc gcd.o activity7.o -o gcd
faysal@DESKTOP-AOGE5FF:/mnt/c/Users/faysa/Dropbox/School/CSC220/Activity7$
```

Part 3- gdb

I was unable to get gdb to run on my Linux subsystem for Windows.
Kept getting errors when trying to run the code inside gbd.
I did compile with -g.
Looks like a memory issue.

```
faysal@DESKTOP-AOGE5FF:/mnt/c/Users/faysa/Dropbox/School/CSC220/Activity7$ gdb --args ./gcd 4 8
GNU gdb (Ubuntu 7.7.1-0ubuntu5~14.04.2) 7.7.1
Copyright (C) 2014 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/gpl.html>
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.  Type "show copying"
and "show warranty" for details.
This GDB was configured as "x86_64-linux-gnu".
Type "show configuration" for configuration details.
For bug reporting instructions, please see:
<http://www.gnu.org/software/gdb/bugs/>.
Find the GDB manual and other documentation resources online at:
<http://www.gnu.org/software/gdb/documentation/>.
For help, type "help".
Type "apropos word" to search for commands related to "word"...
Reading symbols from ./gcd...(no debugging symbols found)...done.
(gdb) run
Starting program: /mnt/c/Users/faysa/Dropbox/School/CSC220/Activity7/gcd 4 8
warning: Error disabling address space randomization: Success
4
[Inferior 1 (process 871) exited with code 04]
(gdb)
```