CSE 333 13su Exercise 8

out: Monday, July 15, 2013
due: Wednesday, July 17, 2013 by **9:00 am**.

Write a C++ program that:

- prompts the user for a positive integer
- prints out all integers that are factors of that integer; feel free to used the simplest, brute-force factorization algorithm you can think of, and you only need to print each factor once. For example, if the user inputs the number 100, the interaction with the terminal would look like:

```
bash$ ./ex8
Which positive integer would you like me to factorize? 100
1 2 4 5 10 20 25 50 100
```

- does so using std::cin to read from the terminal and std::cout to write to the terminal (and, yes, you may have a `using namespace` directive in your code if you don't want to write std:: everywhere)

Your code must:

- compile without errors or warnings on CSE Linux machines (lab workstations, attu, or CSE home VM)
- have no crashes, memory leaks, or memory errors on CSE linux machines
- be contained in a single file called "ex8.cc" that compiles with the command

```
bash$ g++ -Wall -g -std=gnu++11 -o ex8 ex8.cc
```

  do not submit a Makefile.
- be pretty: the formatting, modularization, variable and function names, and so on must make us smile rather than cry. We suggest using the C++ style checker cpplint.py to check your code. (right-click to download, and set execute permissions [chmod +x] if needed)
- be robust: you should think about handling bogus input from the user, and you should handle hard-to-handle cases (if there are any) gracefully.
- have a comment at the top of your .c file with your name, student number, and CSE or UW email address.

You should submit your exercise using the assignment dropbox linked on the main course web page.