

Welcome to the Faculty of Computer Science and Dalhousie University.
Please read the following instructions carefully.

Each team is given a new account. Please keep it confidential until after the competition is over. The judges and coaches should not know which team is which. Your team login is _____ with password _____
Do not put any information which would identify your team in your programs.

Be careful when you first login that you are connecting to locutus.cs.dal.ca rather than the local host. You must go to the Options menu and select locutus before entering your username and password in response to the "Welcome to Locutus" message.

All competitors must wear the red name badges throughout the competition. Also bring them to the conference afterwards.
The help staff will be wearing blue badges. You may ask them for help at any time on such things as how to login, how to edit/compile/print etc.

We have a printer setup on each floor for you to use. The command is
apics_print_2 filename
or
apics_print_3 filename
depending which floor you are on. For security reasons we will not let competitors go to the printers. Instead you should ask one of the staff with blue name tags to bring the printout to you. Only textfiles may be printed.

There are 6 problems for you to solve in 5 hours using one computer. The problems are named A,B,C,D,E,F. Please write your solution in a file with the same prefix. For example, your solution to problem A should be in file A.java, or A.c or A.cc depending on the language you use. Note the suffix .cc for C++. The judge's software is setup for this only. Solutions to problem F would be in F.java, F.c or F.cc and so on. Only these filenames will be accepted. Please put your entire solution to each problem in one file. Java files should have only one public class.

You may use Java 1.1.7 or C or C++. The commands to compile are:

```
Java:  javac A.java
C:     gcc -o A.exe A.c -lm
C++:  g++ -o A.exe A.cc -lm
```

This is for problem A. The commands for problems B-F are similar. Notice that the executable program must be A.class for Java or A.exe for C/C++.

The "-lm" for C/C++ is only necessary if you are using math.h but there is no harm in using it for all problems.

Note that we are using input redirection for all the problems. Your programs should always read input from System.in/stdin/cin depending on the language.

Each of the six problems has one or two datafiles that you may use to test your program. These are stored in a directory ~apics/data/. The names of the data files will be mentioned in the problem. For example, for problem A there is one file A1.dat. In addition the judges have some other data files they will use to see if you have handled all the cases. Each datafile has a matching output file. For example A1.out contains the output expected when A1.dat is used as input. These files are also in ~apics/data/. To run your A program with the first data file use one of:

```
java A < ~apics/data/A1.dat    (for java)
A.exe < ~apics/data/A1.dat    (for C/C++).
```

When you have a problem solved you need to send the program to the judges who are using the username apics. There is a special command setup to do that:

```
~apics/judge X Y
where X is one of A-F and Y is java, c or cc. E.g. ~apics/judge A java
```

Judges will respond in the order that messages are received. Sometimes there will be a delay if they have to confer or many messages arrive almost at the same time. The judges will record the time that solutions are sent to them - not the time that they reply. They will send you one of 4 messages:

- 1) solution to problem X is accepted
- 2) program for X gave wrong output for some test input file.
- 3) program for X gave no output for some test input file.
- 4) program for X gave output improperly formatted

If your program does not compile or run or runs too long the judges will not receive anything and so will not reply.

You may read the reply from the judges using the pine mail program.

The judges will post the results so far in file: ~apics/results
However, if they are busy it may get out of date. Towards the end of the competition they will stop updating the results until it is all over.

During the competition you may use printed reference materials. Unfortunately, you are not allowed to access the world wide web or connect to other systems. Everything you do using the accounts for this competition is monitored/logged. If you are in doubt about something ask a staff member with a blue tag.

Good Luck!! Remember the staff with blue tags are there to help.
After the competition is over everything will be posted in
<http://www.cs.dal.ca/apics/contest00/>