1 Makefile

We have marked your assignment 1, and many of you have done great work. However, some of you have had problems with your assignments, especially on makefile.

The first is the file name. The "makefile" is the reserved key of the "make" command and is an non-type file.

The name of the file MUST be "makefile" or "Makefile".
Any other file name such as "makefile.txt" will cause the "make" command to fail to find your file.

Second is the indentation. The indentation in make file MUST be "tab", not several "space".

For Job 1, a typical Makefile is shown below:

```
all: part1 part2

part1: part1.o
        g++ -Wall -o part1 part1.o

part1.o: part1.cpp Vector.h List.h
        g++ -Wall -o part1.o -c part1.cpp

part2: part2.o
        g++ -Wall -o part2 part2.o

part2.o: part2.cpp Vector2.h List.h
        g++ -Wall -o part2.o -c part2.cpp

clean:
        rm -f part1 part2 *.o
```

After executing the "make all" command, intermediate files "part1.o" and "part2.o" are generated first, followed by executable files "part1" and "part2".

The make clean command deletes all the ".o" intermediate files and "part1" and "part2".

You can find more tutorials on Makefile on the Internet.

2 Linux

Some of you have various problems with the execution of your assignments. Since your assignments will eventually be tested on the Linux system, you'd better make sure that your programs and makefiles work correctly on Linux before submitting

If you don't have Linux on your computer, there are two ways:

1. Attend lab, where you can test your program using CSIL Ubuntu Computer and TA will be there to provide help.

2. Use WSL, which is the built-in Linux subsystem provided by Windows. Here's a tutorial:
https://docs.microsoft.com/en-us/windows/wsl

After installing a linux system, run these two command:

```
apt-get install g++
apt-get install make
```

Then go to the directory where your programs are

```
make all
```

.o files and executable files (like "part1") should appear.

```
./part1
```

Run your program.

```
make clean
```

Delete .o files and executable files