CSE 382: Programming tools

Assignment: Using the make build tool

Objectives

* Learn to manage large projects using make tool
* Automate the build process using make tool

Introduction: **The process of building a program is managed by build tools.** The build utility typically needs to compile the various files, in the correct order. The make build tool is used to manage large projects. It automates the build task. This tool supports C/C++ languages. It is readily available in Ubuntu.

Example: In order to learn this tool follow the following instructions (use vi editor to write the source code).

1. Create a directory “makedemo”.

mkdir makedemo

1. Enter this directory

cd makedemo

1. Create a file called main1.cpp and write the following code in it:

#include "iostream"

#include "func.h"

using namespace std;

int main()

{

function();

function1();

return 0;

}

1. Create a file called **function1.cpp** and write the following code in it:

#include "iostream"

using namespace std;

extern void function();

void function1()

{

cout<<"I am fine in function1";

}

1. Create a file called **function.cpp** and write the following code in it:

#include "iostream"

using namespace std;

void function()

{

cout<<"I am fine in function2";

}

1. Create a file called **func.h** and write the following code in it:

**extern void function();**

**extern void function1();**

1. Create a file called **Makefile** and write the following code in it

compile:

g++ main.cpp func.h function.cpp function1.cpp -o main1

run: compile main1

./main1

1. On terminal type make run

Assignment 1: Write a program to implement the following for a set of 10 words entered in a file string.txt.eg

What input kill bill fax editor rudimentary extempore low high

1. Create a directory passfolder to store all your source files in the same.
2. Create a function lexi() in lexi.cpp file for lexicographical ordering of these words.
3. Create a function reverse() to print all these words in reverse order.
4. Create a function upperc()in up.cpp to check that atleast one character in a word is uppercase.
5. You should use the header file stringcheck.h to call the functions lexi(), reverse() and upperc().
6. Call the above programs in main.cpp file.
7. Write a program in hello.cpp to print “Hello World”.
8. Create Makefile to compile and run your programs.