Week of 2/17/2014

To do list

Discuss Exam. We will cover while loops on the exam.

This while loop is a count controlled loop, since we wanted to repeat the loop a certain

number of times. The count controlled loop may also be referred to as a step controlled

loop. We can write a sentinel controlled loop as well. A sentinel value is a value that

belongs to a type but does not belong to the set you are working with. For example

suppose you are entering names. Names belong to a type called string. When asked for

the name what if you entered ‘quit’?. ‘Quit’ also belongs to the string type, however,

does not belong to the set of names.

int main()

{

 int number;

 number = 1;

 while (number <= 100)

 {

 cout << number << " "; //display number and put some spaces or use setw()

 number ++; //increment number by one

 }

 getchar();

 return (0);

}

In a count controlled loop if the loop control variable (LCV) is incremented by a predetermined number (usually incremented by one) we could use the “for loop”. In a “for loop” the initial value, final value and increment are given by the programmer and the language does the rest.

// whileLoop1.cpp : Defines the entry point for the console application.

//

#include "stdafx.h"

#include <iostream>

using namespace std;

int main()

{

int number;

cout <<"\n\n While loop \n";

number = 1;

while (number <= 100)

 {

 cout << number << " "; //display number and put some spaces or use setw()

 number ++; //increment number by one

 }

cout <<"\n\n For loop \n";

for (number=1; number <=100; number++)

{

 cout << number << " ";

}

getchar();

return (0);

}

Discuss future value and amortization to prepare students for the next assignment.

Data and character storage schemes, EBCDIC, ASCII, Unicode

Assembler, Editor, Compiler, Linker, Loader.

Steps to follow when writing a program

Sematic and Syntax errors

Reserved words in C++

Memory allocation

Variable types and mathematical manipulation of same or mixed types

Determine the length of a string.

Pre-incrementing and post incrementing in C++

Control characters that can be included in the cout statement such as \n.

How to send output to a file

Control structures (sequence, selection, looping, repetition, etc)

Relational and logical operators. Evaluate the expressions.

While loop setup

Output of while loops

Use of break, switch case

Programming questions 2. One 20 points and one 10 points.