

EGR 125
Introduction to Engineering Methods (C++)
File: N125L2B

Lab Assignment #2 – Files

Recall that lab assignments must be completed during the class period and must be demonstrated to the instructor. Let the instructor know when you are ready to demonstrate your final program.

1. Use NotePad to create an input data file. The file should contain 6 numbers as follows:
 - At least one positive number
 - At least one negative number
 - At least one number in scientific notation.
2. Write a program to read the data file (use 6 variables) and find the average.
3. The program should write your name, the date, and the average of the 6 numbers to a new data file.
4. Demonstrate the program to the instructor.

C++ program for Lab2 (main.cpp)

```
//
//      /-----/ \-----/ \-----/
//      / / \ / \ / \ / \ / \ / \ /
//      / / \ / \ / \ / \ / \ / \ /
//
// Date: (today's date)
// Name: (your name)
// Project: Lab2
// Input: The radius and height of a right circular cone
// Output: The volume and lateral surface area of the cone
// Description: Sample program to get familiar with the Dev++
// compiler and simple input/output.
//*****

#include <iostream>      //header containing cout and cin
#include <cmath>         //header containing math functions

using namespace std; //introduces namespace std needed to use cout and cin

int main ( void )
{
    [Add instructions to declare variables, read inputs, calculate outputs,
    and print the results as described earlier.]
    system("pause");
    return 0;
}
```

Template for future C++ programs (template.cpp)

```
//
//      /-----/ \-----/ \-----/
//      / / \ / \ / \ / \ / \ / \ /
//      / / \ / \ / \ / \ / \ / \ /
//
// Date:
// Name:
// Project:
// Inputs:
// Outputs:
// Description:
//*****

#include <iostream>      //header containing cout and cin

using namespace std; //introduces namespace std needed to use cout and cin

int main ( void )
{
    return 0;
}
```