Programming – DT228/1

Lab 1 – Tuesday, September 24th, 2013

Note: Please use file names of 10 characters or less for each program you write. **<u>Do not include blank spaces in file names</u>** - use an underscore (_) instead if necessary. Always include .c at the end of each filename.

Ask the lab supervisor for assistance if you have difficulties using Borland.

1. Enter the first program discussed in lecture class. This involved declaring 3 variables (int, float, char). Name this program **MyFirstIO.c** and save it on your drive in a folder called *week2*. This should be created within a parent folder called *C* (e.g. U:/C/week2) on the U: drive.

    Compile and run this program. Make small changes to your C code and re-compile and run the program. Notice the difference(s) your changes have made.

Remember, use plenty of white space in your code. Do not squash all the code together, line after line !!

2. What is wrong with this program?

    ```
    #include <stdio.h>;
    main[]
    {
      /*Program to illustrate errors in a C program.
      int i, j;
      float i;

      j = 40000;

      PRINTF("The value of i is %d" i);
      PRINT("Size of an integer is %d", sizeof(int));
    ]
    ```

    Write this program as a new file, make the necessary corrections and compile, run it.

3. Write a new program (i.e. create a new file) that will display (to Standard output) your name and address on separate lines.
4. Edit your program in Q3 to include an empty blank line between your name and each line in your address. Also display today's date following the address.
5. Write a new program (new file) that declares 3 variables (int, float and char). Assign any value of your choice to these variables. Using a *printf( )* statement, print the

contents of these variables using the **<u>wrong</u>** delimiter, i.e. use a %d for a float, %c for a float, %f for a char. Compile and run your program. What happens?

Change your program to use the correct delimiter, i.e. %d for an int, %f for a float, %c for a char. This time, use %d for a char. Notice anything different? If so, what is causing these differences? Think about what we talked about in lecture class.