Lab 7

Task 25

Change the following program such that it will find and print out the biggest value in the array *value*.

Requirements:

- The line in red cannot be changed; all others can be modified (including function name)
- After calling the sub-function, value of each element in array *value* should be SAME as before the call. The biggest value is returned by the sub function.

```
void exchange(float a[], int n); // function prototype
int main(){
    float value[4] = {2.5, 1, 1.2, 5.2};
    exchange(value, 4);
    printf("value[0] = %f", value[0]);
    return 0;
}
void exchange(float a[], int n){
    float temp;
    temp = a[0];
    a[0] = a[n - 1];
    a[n - 1] = temp;
}
```

Task 26

Write a program that includes two functions: `main` function and `Fac(int n)`. Function `main` reads a positive integer *n*, and calls the function `Fac` to compute the factorial numb er of *n*. Do not refer to the function in the lecture 7 note.

Task 27

Write a program that includes two functions: *main* function and *Power3(int n)*. Function *main* reads a positive integer, and call the function *Power3* to compute 3^n and print out the result. *Power3(int n)* must be a recursive function.

Add info about a program

At the top of each program, add the information (comments in GREEN). It is also required for EACH lab program in this semester.

```
// Programmer: ……
// Student ID: ……
// Date:….
// Task no: Week_#_Task_#
// Requirements: ……
#include<stdio.h>
int main()
{
   …….
}
```

Submission

- Compressed *.cpp into one file with file name in the format *Lab7_#######.zip* and submit it into iSpace.
- All .cpp files must be able to run under Visual 2010 C++ Express. The outputs will be checked against the outputs under Visual 2010 C++ Express