COSC 120 -601 Lab 1

Name: Jeremy Scheuerman

Lab 1.1

Exercise 1

Exercise 2 (source code)

#include <iostream>

using namespace std;

int main()

{

   cout << "Now is the time for all good men" << endl;

   cout<<"To come to the aid of their party"<<endl;
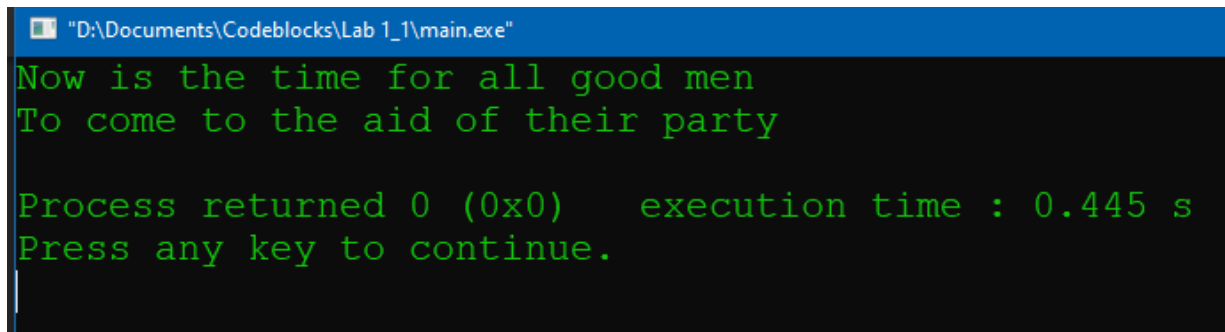
   return 0;

}

Exercise 3 compiler

-------------- Build: Release in Lab 1_1 (compiler: GNU GCC Compiler)---------------

Target is up to date.

Nothing to be done (all items are up-to-date).

Exercise 4

```
Now is the time for all good men
To come to the aid of their party

Process returned 0 (0x0)    execution time : 0.445 s
Press any key to continue.
```

1.2

Exercise 1

#include <iostream>

using namespace std;

int main()

{

   int number;

   float total;

   cout <<"Today is a great day for LAb"

   cout <<endl <<"Let's start off by typing a number of your choice" end1;

   cin >>number;

   total=number*2;

   cout <<total << " is twice the number you typed << endl;"

   return 0;

}

Exercise 2:

(Compiler error)

-------------- Build: Debug in Semiprob\ (compiler: GNU GCC Compiler)---------------

g++.exe -Wall -fexceptions -g -c D:\Documents\Codeblocks\.cbp\Semiprob\main.cpp -o

obj\Debug\main.o

g++.exe -o bin\Debug\Semiprob\.exe.exe obj\Debug\main.o

D:\Documents\Codeblocks\.cbp\Semiprob\main.cpp: In function 'int main()':

D:\Documents\Codeblocks\.cbp\Semiprob\main.cpp:10:42: error: expected ';' before 'cout'

   10 | cout <<"Today is a great day for LAb"

      | ^

      | ;

   11 | cout <<endl <<"Let's start off by typing a number of your choice" end1;

      | ~~~~

D:\Documents\Codeblocks\.cbp\Semiprob\main.cpp:15:62: error: expected ';' before 'return'

   15 | cout <<total << " is twice the number you typed << endl;"

      | ^

      | ;

   16 |

   17 | return 0;

      | ~~~~~~

Process terminated with status 1 (0 minute(s), 0 second(s))

2 error(s), 0 warning(s) (0 minute(s), 0 second(s))

Successful Compile

g++.exe -Wall -fexceptions -O2 -c D:\Documents\Codeblocks\.cbp\Semiprob\main.cpp -o
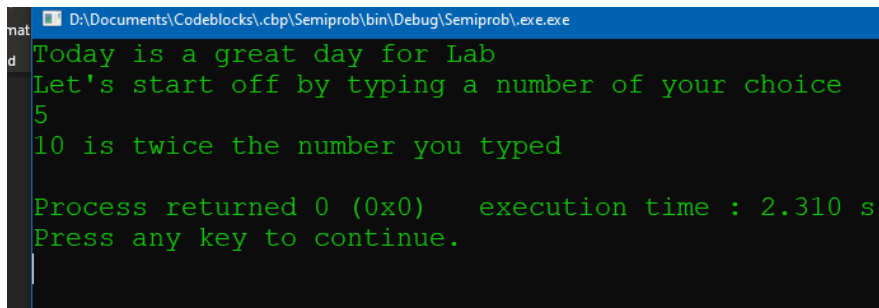
obj\Release\main.o

g++.exe -o bin\Release\Semiprob\.exe.exe obj\Release\main.o -s

Output file is bin\Release\Semiprob\.exe.exe with size 22.00 KB

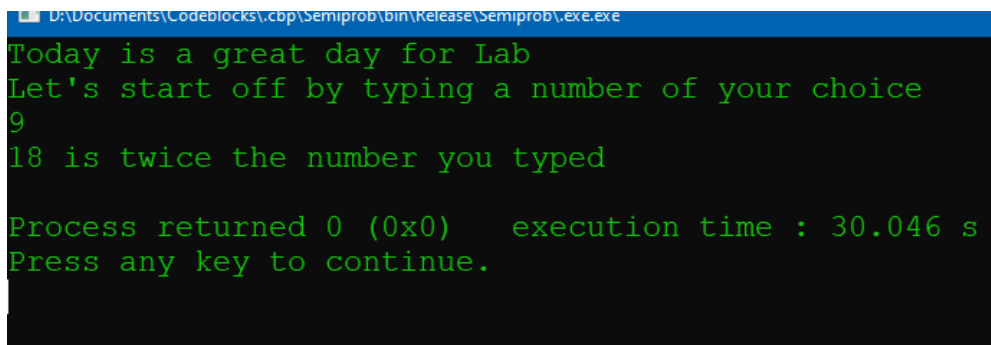*Process terminated with status 0 (0 minute(s), 0 second(s))*

0 error(s), 0 warning(s) (0 minute(s), 0 second(s))

Exercise 3

Exercise 4

```
Today is a great day for Lab
Let's start off by typing a number of your choice
3
6 is twice the number you typed

Process returned 0 (0x0)    execution time : 3.446 s
Press any key to continue.
```

1.3

Exercise 1

#include <iostream>

using namespace std;

int main()

{

    float number;

    int divider;

    divider=0; ******* error

    cout <<"Hi there" <<endl;

    cout <<"please input a number and then hit return" <<endl;

    cin >>number;

    number=number/divider;

```
    cout << "Half of your number is " number << endl;

    return 0;

}
```

Exercise 2

Runtime errors because division ny 0

-------------- Build: Release in Runprob (compiler: GNU GCC Compiler)---------------

g++.exe -Wall -fexceptions -O2 -c D:\Documents\Codeblocks\Runprob\main.cpp -o

obj\Release\main.o

g++.exe -o bin\Release\Runprob.exe obj\Release\main.o -s

D:\Documents\Codeblocks\Runprob\main.cpp: In function 'int main()':

D:\Documents\Codeblocks\Runprob\main.cpp:18:38: error: expected ';' before 'number'

   18 | cout << "Half of your number is " number << endl;

      | ^~~~~~~

      | ;

Process terminated with status 1 (0 minute(s), 0 second(s))

1 error(s), 0 warning(s) (0 minute(s), 0 second(s))

Exercise 3

```
D:\Documents\Codeblocks\Runprob\bin\Release\Runprob.exe
Hi there
please input a number and then hit return
8
Half of your number is 4

Process returned 0 (0x0)    execution time : 5.314 s
Press any key to continue.
```

Exercise 4

(messing with data types)


```
D:\Documents\Codeblocks\Runprob\bin\Release\Runprob.exe
Hi there
please input a number and then hit return
9
Half of your number is 4.5

Process returned 0 (0x0)    execution time : 3.101 s
Press any key to continue.
```

1.4

Exercise 1

//This program takes two values from the user and then swaps them

//before printing the values.The user will be prompted to enter

//both numbers

//Place your name here

#include <iostream>

using namespace std;

int main()

{

```cpp
    float firstNumber;

    float secondNumber;


//Prompt user to enter the first number


    cout<<"Enter the first number"<<endl;

    cout<<"Then hit enter"<<endl;

    cin>>firstNumber;


//Prompt user to enter the second number.


    cout<<"Enter the second number"<<endl;

    cout<<"Then hit enter"<<endl;

    cin>>secondNumber;


//Echo print the input.


    cout<<endl<<"You input the numbers as "<<firstNumber

        <<" and "<<secondNumber<<endl;
//Now we will swap the values.

    firstNumber=secondNumber;

    secondNumber=firstNumber;
//Output the values.
```

cout<<"After swapping,the values of the two numbers are "

<<firstNumber<<" and "<<secondNumber<<endl;

return 0;

}

Exercise 2

-------------- **Build: Release in logicprob (compiler: GNU GCC Compiler)**---------------

Target is up to date.

Nothing to be done (all items are up-to-date).

Exercise 3

```
Enter the first number
Then hit enter
8
Enter the second number
Then hit enter
7

You input the numbers as 8 and 7
After swapping,the values of the two numbers are 7 and 7

Process returned 0 (0x0)   execution time : 30.262 s
Press any key to continue.
```

Exercise 4

```
        <<" and "<<secondNumber<<
//Now we will swap the values.
    temp=firstNumber;
    firstNumber=secondNumber;
    secondNumber=temp;
//Output the values.
```

Solution

1.5 challenge

Exercise 1

```cpp
#include <iostream>

using namespace std;

int main()
{
    float number;

    cout <<"Please enter the amount of kilometers traveled" <<endl;
    cin >>number;
    //get input

    number*=0.621;
    //multiply
    cout << "The amount of miles traveled is  "<<number << endl;
    return 0;
    //done
}
```

Exercise 2

No compiler errors

Exercise 3

```
Please enter the amount of kilometers traveled
5.6
The amount of miles traveled is  3.4776

Process returned 0 (0x0)   execution time : 2.553 s
Press any key to continue.
```