Lab 04 - Functions & Selection Statements

Direction: Submit your typed work(s) as an upload(s) to the Labs directory of your GitHub repository or Dropbox, or in your correct Lab04 google classroom assignment. Each part should be a separate files. The files named should be "lab4A.txt" and "lab4B.cpp" respectively.

Part A: In class

Your objective is to write ONLY the line number and the entire corrected line for each line that has a **syntax error** in the code segment below.

```
01   void G(int a,int b)
02   {
03     int r = (a - b) * (a * a + a * b + b * b);
04     return r;
05     return 4;
06   {
07
08   int main()
09   {
10     int s, t, r;
11
12     cout >> "Enter two numbers: ";
13     cin >> s;
14     cin >> t;
15
16     cout << G(s,t) << '\n';
17     r = g(t,s);
18     cout << r << "\n";
19     return 0;
20   }
```

Part B: Take home

Your objective is to write a complete cpp program that defines the following functions and calls them in the main function.

☐ A void function named `NextLeapYear()` that takes an int reference parameter. If the parameter is positive, the function assigns the parameter the next leap year after the current value of the parameter; otherwise, it assigns 4 to the parameter

☐ A string function named `ColorCode()` that takes an int parameter. It returns `"red"` if the parameter is a multiple of 3, `"blue"` if the parameter is a multiple of 4, `"purple"` if the parameter is a multiple of both 3 and 4, or `"yellow"` if the parameter is a mutiple of neither 3 nor 4.

☐ A void function named `Sort4()` that takes four double reference parameters named a, b, c and d respectively. It swaps the values of the parameters so that $a \leq b \leq c \leq d$.