



## slowprint() Function

Write a C++ function called `slowprint()` that will print text character-by-character in a slow manner like a typewriter.

The code is provided below. You only need to fill in the missing information.

```
#include <iostream>
#include <cctype>
#include <windows.h> // for sleep(milliseconds) function

using ____ std;

____ slowPrint(string toPrint)
{
    for(int i = 0; i < ____ .length(); ____ )
    {
        cout << toPrint.at(____);
        Sleep(150);
    }
}

int main()
{
    slowPrint("This is my story\nThis is the second line\nok bye!\n");
    return ____;
}
```

# Solution

The following code prompts the user for a year between 1900 and 2200 and informs the user if the year is a leap year or not.

```
#include <iostream>
using namespace std;

int main(int argc, char** argv)
{
    int year;
    bool isLeap;

    // Prompt the user for a year. Repeat until a valid year is entered.
    do
    {
        cout << "Please enter a year (1900 to 2200): ";
        cin >> year;
    }
    while(year < 1900 || year > 2200);

    // Assume year is not a leap year.
    isLeap = false;

    // If year is divisible by 4, it is a leap year
    if(year%4 == 0)
    {
        isLeap = true;
    }

    // If year is divisible by 100, it is not a leap year
    if(year%100 == 0)
    {
        isLeap = false;
    }

    // If year is divisible by 400, it is a leap year
    if(year%400 == 0)
    {
        isLeap = true;
    }

    if(isLeap == true)
    {
        cout << "\nThat is a leap year.\n";
    }
    else
    {
        cout << "\nThat is not a leap year.\n";
    }

    return 0;
}
```