CIS 1.5 Fall 2009 Lab I.3

1. Using integer variables
   - Create a program called `bday.cpp` using Code::Blocks
   - Declare two integer variables inside the `main()` function of your program:

     ```
     int day;
     int month;
     ```

   - After you declare them, set the value of these variables to the day and month in which you were born:

     ```
     day = 1;
     month = 1;
     ```

   - Then make your program say "happy birthday on 1/1" (or whatever your birthday is).

     ```
     cout << "Happy Birthday on " << day << "/" << month << "\n";
     ```

   - Compile and run it to make sure it works.

2. Using character variables
   - Create a new program called `initials.cpp`
   - Declare three character variables inside the `main()` function of your program:

     ```
     char first;
     char middle;
     char last;
     ```

   - After you declare them, set the value of these variables to your initials;

     ```
     first = 'S';
     middle = 'D';
     last = 'P';
     ```

   - Then change the output of your program. Say something creative using your initials.
     Here is an uncreative example:

     ```
     cout << "My initials are " << first << middle << last << "\n";
     ```

   - Compile and run it to make sure it works.

3. Adding it all up
   - Create a new program called `initnum.cpp` by copying `initials.cpp`.
   - Declare three integer variables after the three character variables that are already there from the `initials` program.
   - Assign values to each of the integer variables by converting a character variable. YOu can do the first one like this:

```
char first;
int first_num;
first = 'S';
first_num = (int)first;
```

and then you'll need to repeat something similar for the second and third initials.

- Now declare another integer variable called `sum`. Set "sum" equal to the total of the three integer values. Output the value of `sum`.
- Since S has the value 83, D has the value 68 and P has the value 80, for my initials `sum` would have the value 231.
- Compile and run the program to make sure it works.

4. Dividing it up

- Add a new variable to your program `initnum.cpp`.

```
double average;
```

- Set the value of `average` to be the value of `sum` divided by 3.
- Output the value of `average`.
- Is the value you output a fraction?
  Hint: you need to cast.
- Compile and run the program to make sure it works.