

# Creating Variables!

## Instructions

Create a file called [INSERTDATE] [Your name] Variables.cpp. (For example, if I made a file it would be called '20150913 Jas Variables.cpp') Within that file, code all of the following assignments and number each one with comments. Print everything on a different line unless stated otherwise.

Example:

```
int main()
{
    // problem 1
    what;
    // problem 2
    dothething;
    ...
}
```

## Useful information for variables

### Data types

- `bool` : true or false
  - `int` : whole numbers
  - `double` : whole numbers *and* decimals
  - `float` : numbers between (and including) 1 and -1.
  - `string` : set of words
  - `char` : a single character
1. Create **3** integers named `a` , `b` , and `c` . Set them to different values. Then print out their sum.
  2. Create another integer named `d` . Make it equal to the product of a, b, and c. Then print out `d` .  
(Hint: to find the product, multiply all the variables together).
  3. Create variable called `average` and make it equal to the average of `b` , `c` , and `d` .

*(Hint: the average is the sum of all numbers divided by the amount of numbers—use a double. Remember to use parentheses!)*

4. Create a string for your favorite artist and another string for your favorite song. Use the variables to print out “`My favorite song is [song] by [artist].`”
5. Ask the user for a number and divide it by 2. Print out the result. *(Hint: use a double.)*
6. Ask the user for their age. Print out their age in week. Use the following format: “`Your age is in years is [years age] and your age in weeks is [age weeks].`”