Mia Nguyen
HW1: Pseudocode Assignment

**Problem 1:**

```
input fahrenheit value
celsius = 5/9 (fahrenheit - 32)
output celsius value
```

**Problem 2:**

```
currentPopulation = 328,441,867
calculate secondsInOneYear = 365 * 24 * 60 * 60
calculate birthsInOneYear = secondsInOneYear / 8
calculatedeathsInOneYear = secondsInOneYear / 12
calculate immigrantsInOneYear = secondsInOneYear / 27
calculate populationGrowthInOneYear = birthsInOneYear +
immigrantsInOneYear - deathsInOneYear
calculate populationAfterOneYear = currentPopulation +
populationGrowthInOneYear
Output populationAfterOneYear
```

**Problem 3:**

```
Output menu: "Enter Fox, Bunny, Sloth, or Quit"
Input animal

while animal not equal to Quit
    if animal equal fox
        input agility
        input strength
        speed = 0
    else if animal equal bunny
        input agility
        input speed
        strength = 0
    else if animal equal sloth
        input strength
        input speed
        agility = 0
Calculate hireScore = (1.8 * agility) + (2.16 * strength) + (3.24 *
speed)
```

```
Output hireScore
Output menu: "Enter Fox, Bunny, Sloth, or Quit"
Input animal
```

**Problem 4A:**

```
balance = 10000
months = 0
while balance > 0
    calculate: balance = (balance - 500) * 1.005
    calculate: months = months + 1
calculate: years = months / 12
output (years)
```

**Problem 4B:**

```
Input balance
Input annualRate
Input monthlyExpenditure
set month to 0
while balance > 0
    set initialBalance = balance
        calculate: balance = (initialBalance - monthlyExpenditure) *
(1 + annualRate/12/100)
        calculate: months = months + 1
        if balance > initialBalance
            exit while loop
calculate: years = months / 12
output (years)
```

**Problem 5:**

There are two compile errors. In line 11,  Punith typed "cot" and not
"cout"  and did not include a semicolon at the end of the line.
There are no runtime errors.
The final code should look like this:

```
// CS1300
// Author: Punith Sandhu
```

```cpp
// Recitation: 123 - Favorite TA
// Homework 1 - Problem 101 -- Hello 1300!

#include <iostream>
using namespace std;

// hello program: it prints "Hello 1300!"
int main(){
    cout << "hello 1300!" << endl;
    return 0;
}
```