Exercises

Practice your hands on what you have learned so far.

We'll cover the following

Question

Write a program that converts 27^o from degrees Fahrenheit `F` to degrees Celsius `C` using the following formula, and write the result to the screen:

$$C = \frac{(F - 32)}{1.8}$$

Solution

```
#include <stdio.h>
double degF_to_degC(double degF)
{
  double degC;
  //Write your code below and put your conversion
  //in degC

  return degC;
}
```

Question

Write a program that computes the (two) roots of the quadratic equation:

$$ax^2 + bx + c$$

where $a = 1.2$, $b = 2.3$ and $c = -3.4$.

Hint: You can hard-code values of a, b and c and then compute and print the two solutions for x, to 5 decimal places. You can use WolframAlpha to check your arithmetic.

Solution

```
#include <stdio.h>
#include <math.h>


int * solveEquation(int * myInput)
{

  double a, b, c, x1, x2;
  //Don't worry if you don't understand the next three lines
  //for now
  a = myInput[0];
  b = myInput[1];
  c = myInput[2];
  //The a, b and c of the equation are stored in the variables
  //above


  //Write your code here and save the values in x1 and x2
  //variable



  myInput[3]=x1;
  myInput[4]=x2;


  return myInput;


};
```