1. Programming is 'easy'!: The following program in C++ outputs the even numbers between 12 and 80:

```
#include <iostream>
using namespace std;
int main()
{
  int j=0;
  for(int i=12; i<= 80; ++i)
    if(i\%2 == 0)
      {
cout << i << "\t";
j++;
if(j\%5 ==0)
  cout << "\n";
      }
  }
  cout << "\n";
}
}
The output is:
12 14 16 18 20
22 24 26 28 30
32 34 36 38 40
42 44 46 48 50
52 54 56 58 60
62 64 66 68 70
72 74 76 78 80
```

How would you modify the program so that it prints all the even numbers between 4 and 120?

- 2. Programming is 'easy'!:
  - (a) Go to my webpage by googling "luis fernandez math". Scroll to the bottom and click on "Newer more advanced version of the converter". You will see a webpage, it does not matter what it does.
  - (b) Enter some first name, last name, section and class number (make the values up, it does not matter). Then scroll down and click on "See the converted file for inspection".
  - (c) You will see a small window opening with some text. Part of the text says "2022\_Spring\_" and then the initial and last name you entered.
  - (d) Now go to "View" at the top of your browser, select "Developer" and "View Source". You will see the source of the page that you are viewing. You can see it is a mess, you probably do not understand a thing (it is written in javascript and html). It does not matter. Save the source in the computer and open it with notepad.
  - (e) Now: modify the program so that it shows "2022\_Fall" instead of "2022\_Spring". Even if you do not know the language or anything that is written, you can do this!
- 3. In a Python shell: Announce two variables, say a and b, with some values, say 1000 and 27, i.e.  $a=1000,\,b=27$ , then print their sum, average and difference.
- 4. Write a program that finds the average of two numbers provided by the user (you need to prompt the user for the numbers using "number1 = input("Enter a number")", for example).