# Homework 2

Due date: Monday February 2, 11:59pm

write a program called `home2.py` containing

1. a function that prints the Fibonacchi series (we discussed this in class using recursion), but use a **for** loop and not recursion.
2. Write a function that can generate a grid returning a list of coordinates (x,y) using as arguments the bounds for x and the bounds for y and the grid step size.
3. Write a function `myplot`, that can take a list of coordinates (x,y) that are on a grid. The python function will plot this function $f(x, y) = (\sin x^4)y^2(\cos y^4)x^2$ over the range $x : 0.5, 2$ and $y : 0.5, 2$. The result should be
   (a) a 3D plot
   (b) a contour graph

   side by side as a PDF or PNG file.

Send the file `home2.py` and the plot in an compressed archive (.tar.gz or .zip) to beerli@fsu.edu.