

Homework 2

Due date: Wednesday Feb 8 2017, 11:59pm

write a program called `yourname_home2.py` containing

1. a function that prints the Fibonacci series (we discussed this in class using recursion), but use a for loop and not recursion. It uses one argument: the number of elements in the series, like this `fibonacci(n)`
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. X and y are floats, not integers, the stepsize is also a float.
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 $y : 0.5, 2$. Make sure that the resolution of your plot is good enough to see the patterns and details of this plot (experiment with stepsize)
 - (a) a 3D plot
 - (b) a contour graph

Deliver the two plots side by side in a PDF or PNG file (call it `yournamehome2plot.pdf` or `...png`)

Send the file `yourname_home2.py` to `beerli@fsu.edu`, use "ISC4304 home2 yourname" as subject line.