Python Problems for Skywalker Aryan

Feb 01, 2016

Write a program showgrafix.py which displays a drawing by reading in 2D coordinates from a text file. Say we have a file called square.txt which looks like:

```
# draws a square

-50 50 50 50

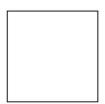
-50 -50 50 -50

-50 50 -50 -50

50 50 50 -50
```

Your program will read in this file (use the **open()** function) and draw 2D lines using **turtle**. Each line of text is of the form x1 y1 x2 y2 which defines a 2D line drawn from (x1, y1) to (x2, y2). Now if you run your program:

\$python3 showgrafix.py square.txt



You get a square. Use sys.argv to get the file name, and another thing you need to make sure is that you skip all lines in the input file that begins with the # character - since those lines are just comments. Also, ensure that there are four numbers in each line, so your program doesn't crash!

You could even write **another** Python program to generate these kinds of input files. I wrote a small program to create the file **geom.txt**, and look what I get when I run:

```
$python3 gengrafix.py
$python3 showgrafix.py geom.txt
```

Think of how you can write your own gengrafix.py.

