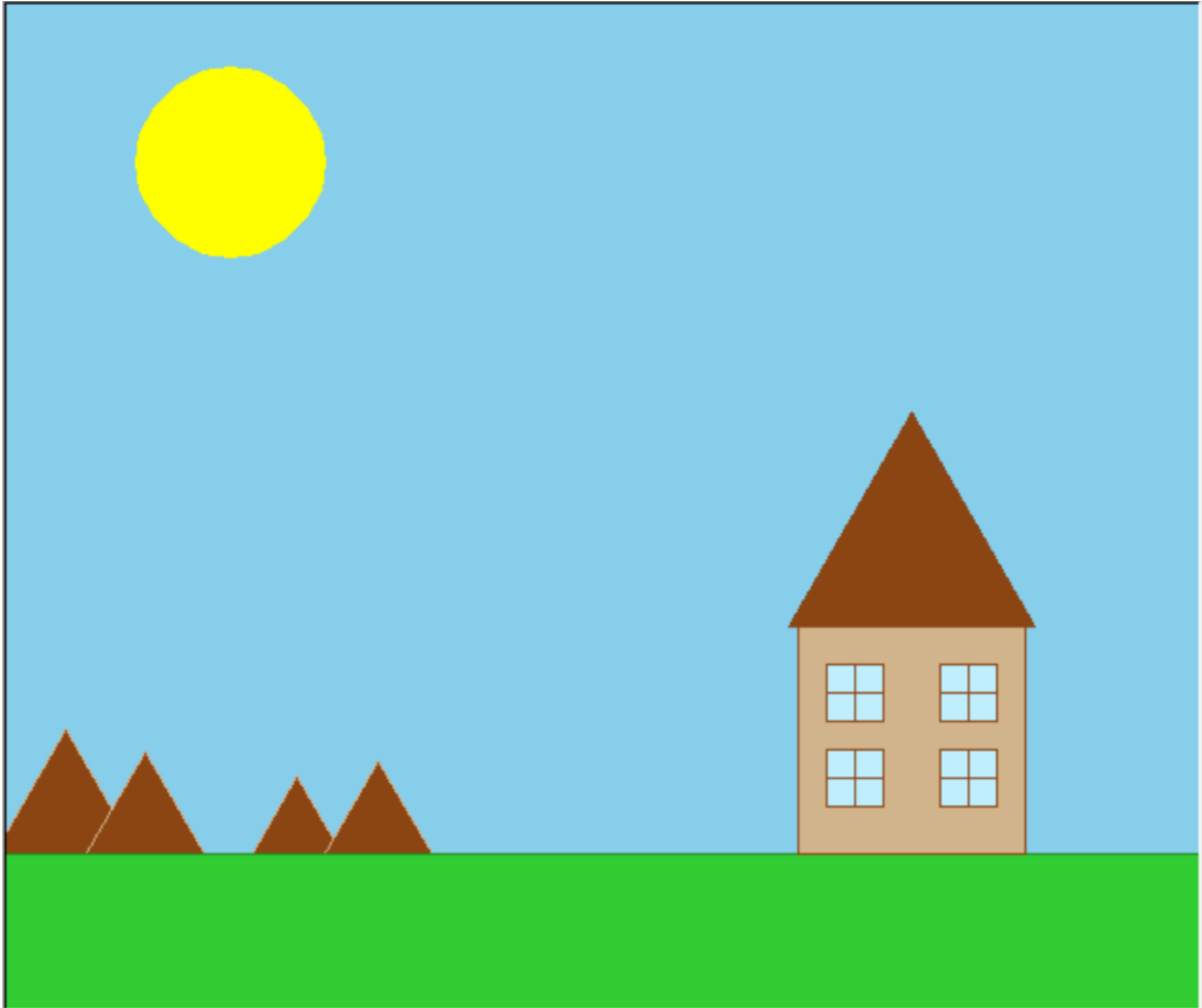


# SI@UCF Python

## Homework Assignment: House

Draw a picture using turtle like the image below:



The picture must include:

- Sky background
- Land
- A sun
- Mountains
- A house with
  - Four windows and
  - A roof

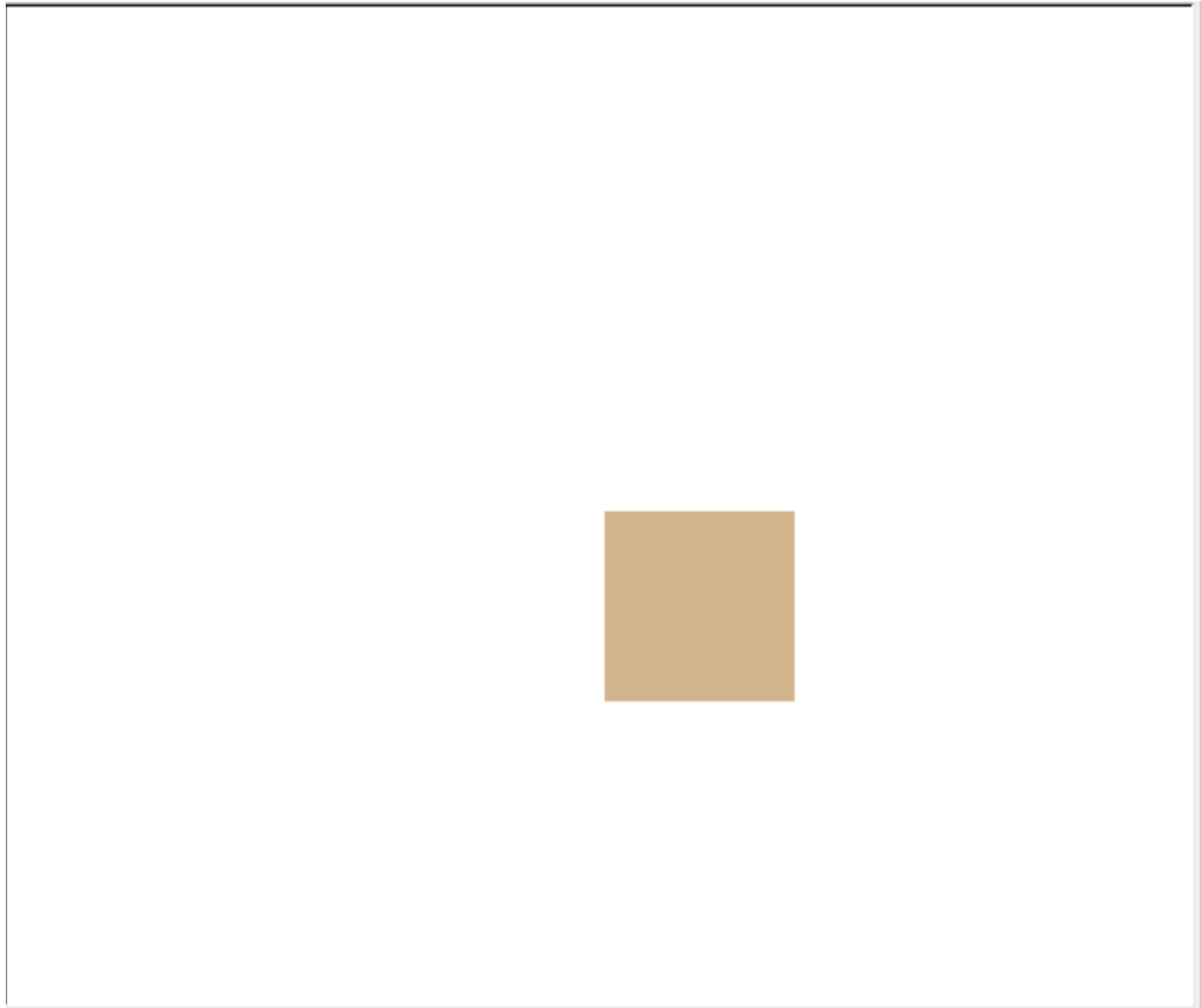
Complete this assignment using the required functions below, but you may add any helper functions.

### **Function: drawSquare**

`def drawSquare(x, y, sideLength):`

Draw solid square axis aligned with top left corner at (x, y) coordinate with side length sideLength.

An example calling drawSquare(0, 0, 100)



### **Function: drawTriangle**

`def drawTriangle(x, y, sideLength):`

Draw a solid equilateral triangle starts at (x, y) coordinate with side length sideLength, and set heading (or the direction it is facing when starts) to the given orientation

An example calling drawTriangle(0, 0, 100)



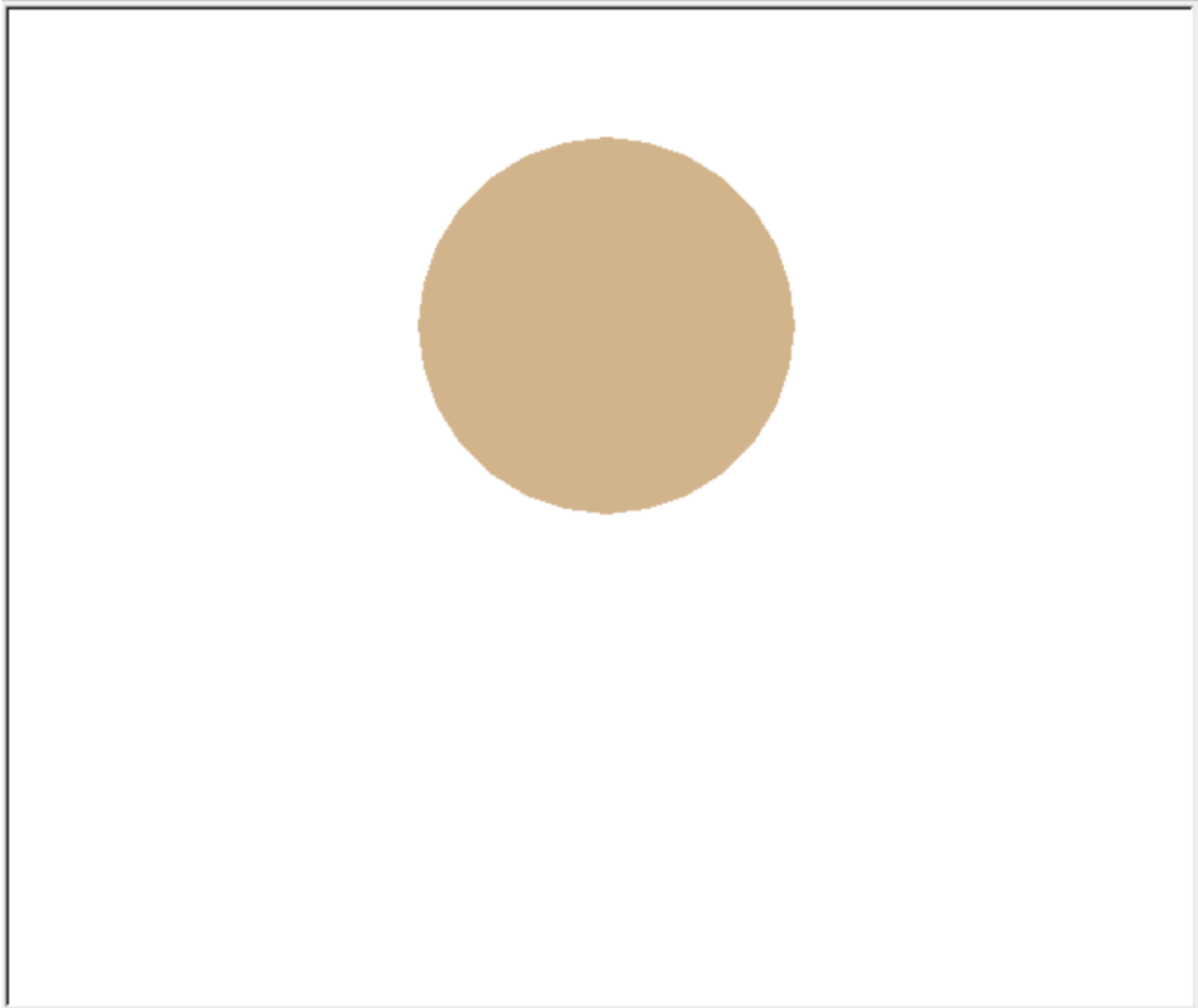
### **Function: drawCircle**

**def** drawCircle(x, y, radius):

Draw a solid circle with given (x, y) and radius

Note: turtle has a circle() function

An example calling: drawCircle(0, 0, 100)



### **Function: drawMountains**

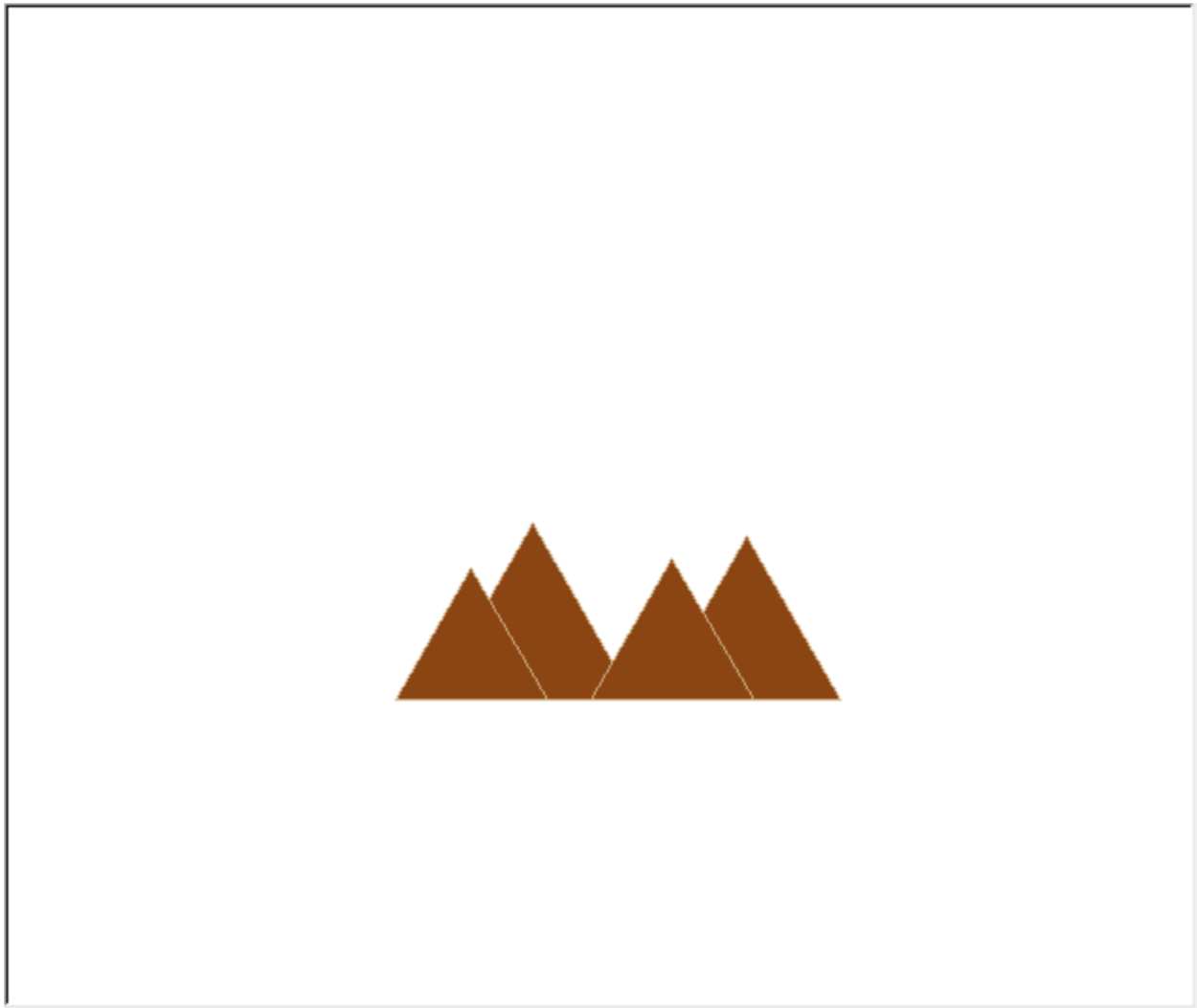
**def** drawMountains(num, x, y, minSize, maxSize):

draw a group of equilateral triangles by calling drawTriangle() num times

starts at (x, y) coordinates

the side length of the triangle is in the range between minSize and maxSize

An example calling drawMountains(4, -200, -100, 80, 120)



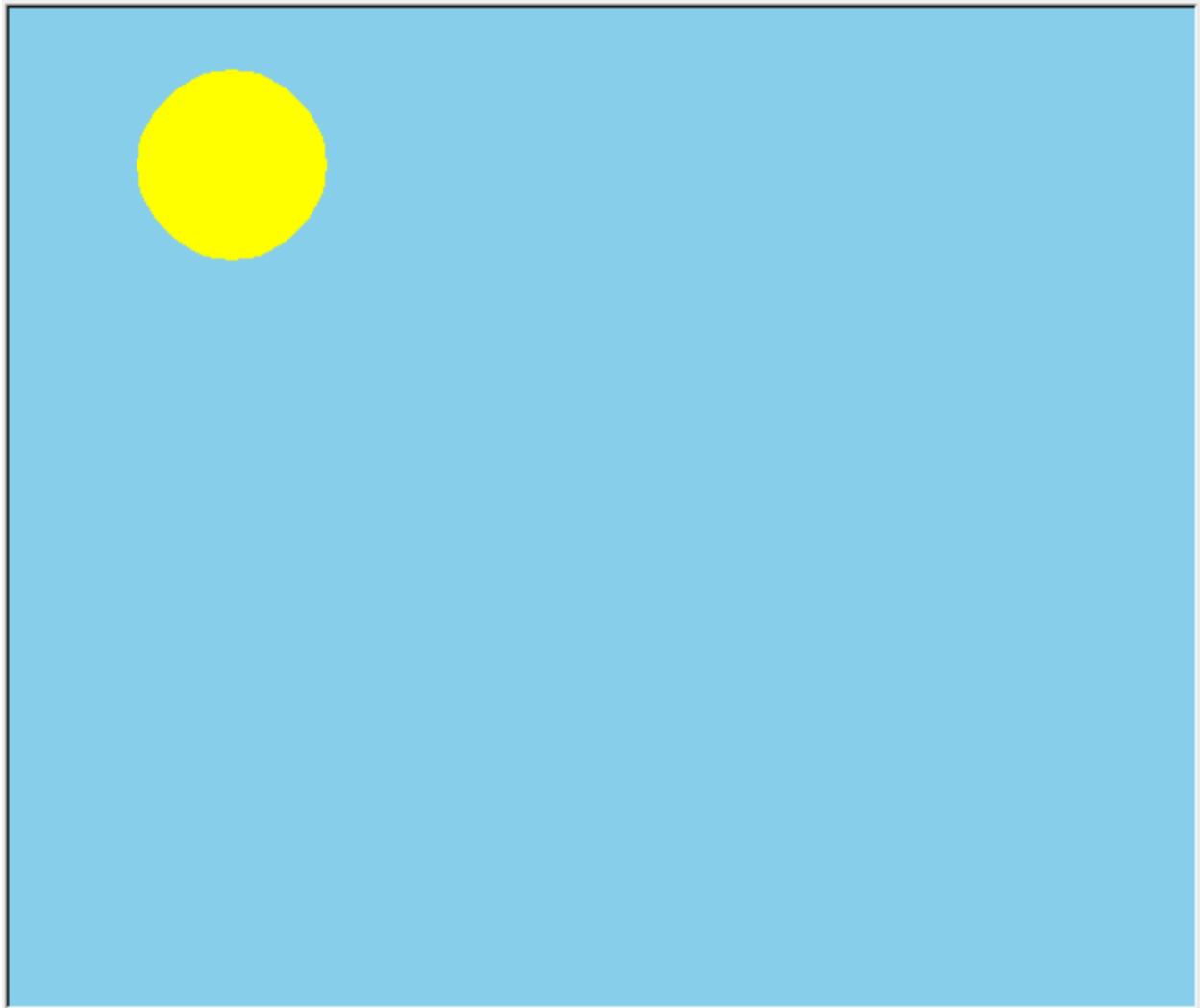
## **Function: drawSky**

**def** drawSky():

draw a sky color background and a sun on top of the blue background.

Use functions created above

An example calling drawSky()



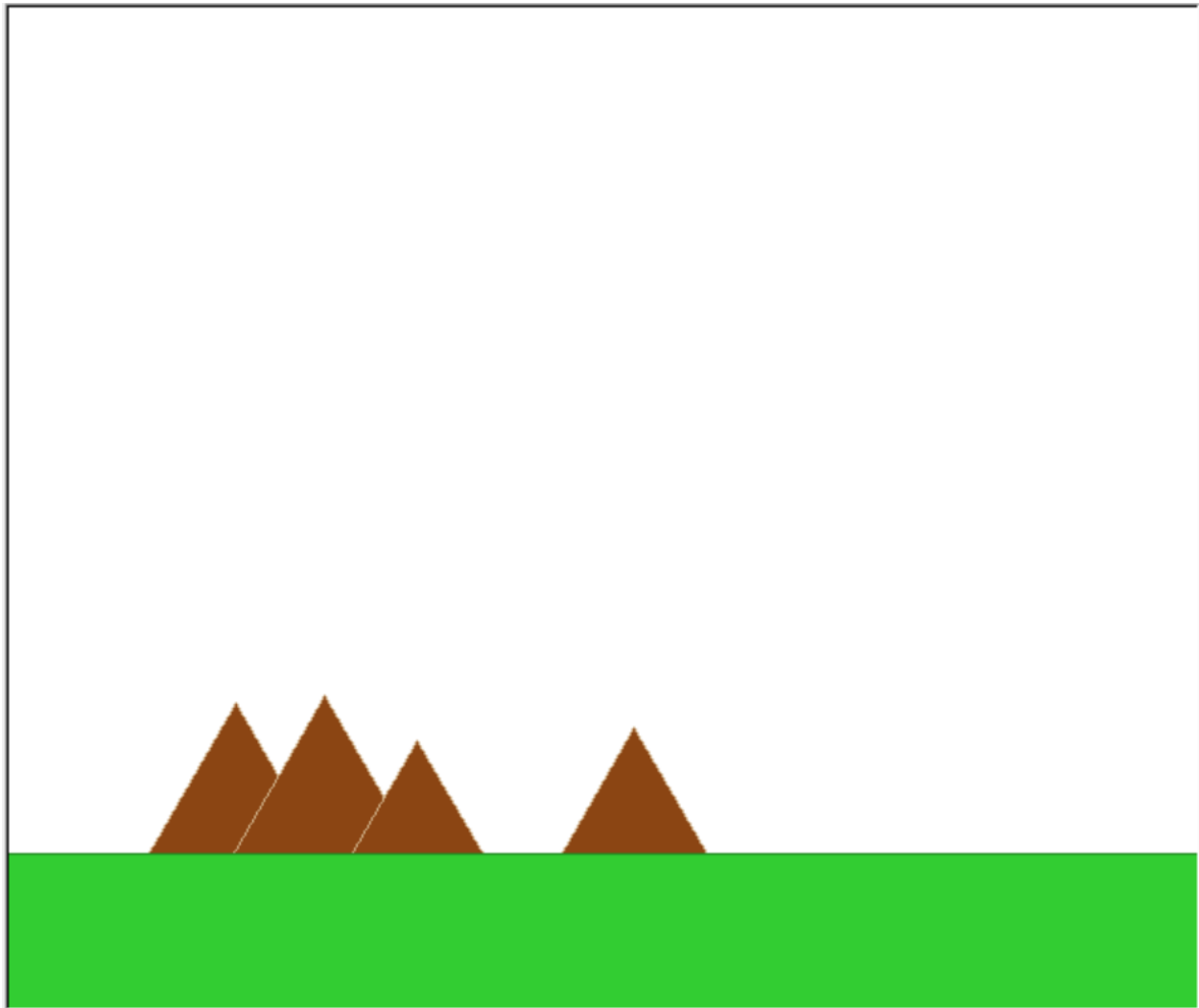
### **Function: drawLandscape**

**def** drawLandscape():

draw mountains and lands

use functions created above

an example calling drawLandscape()

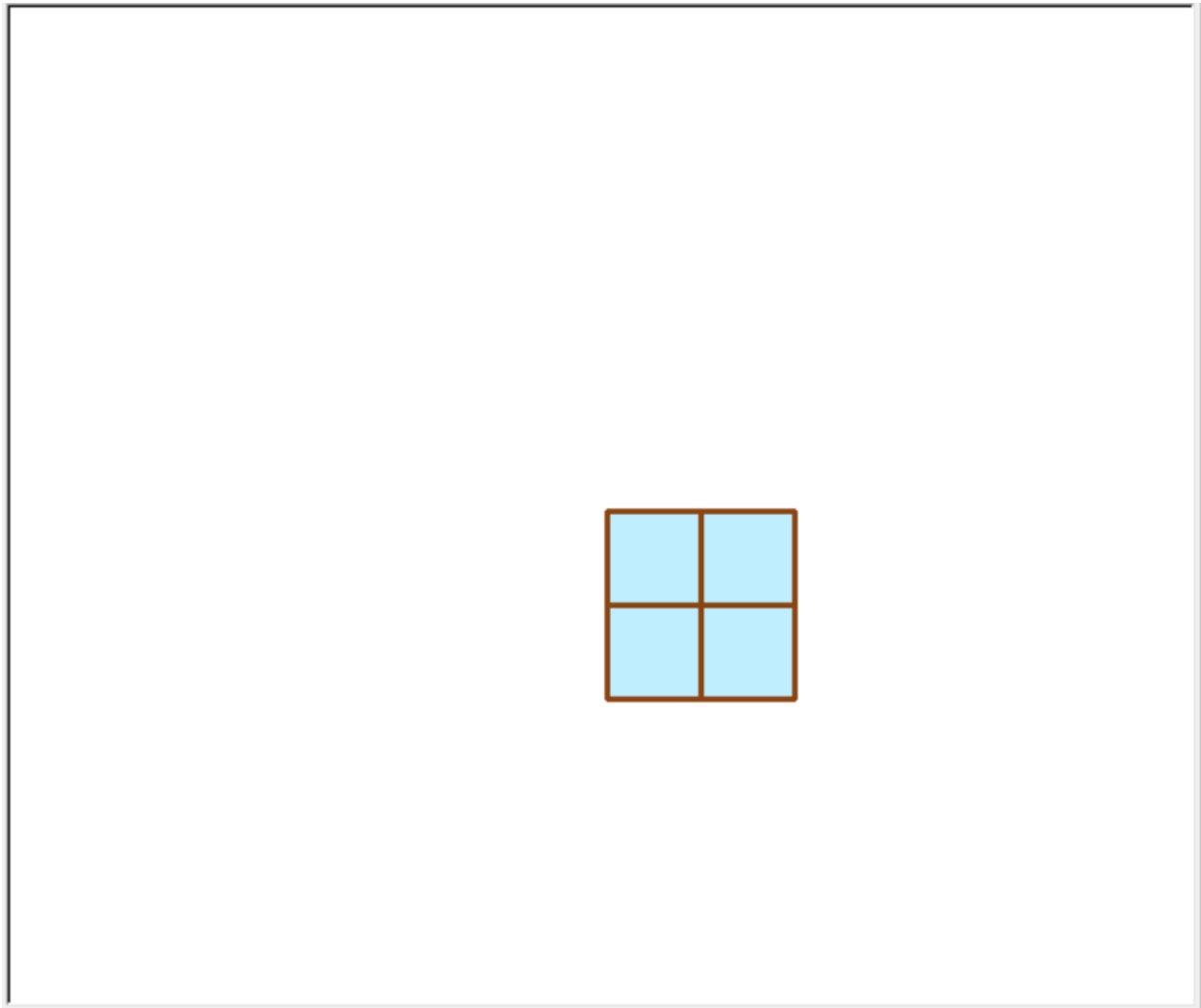


### **Function: drawWindow**

`def drawWindow(x, y, size):`

    Drawing a window with frame

    An example `drawWindow(0, 0, 100)`



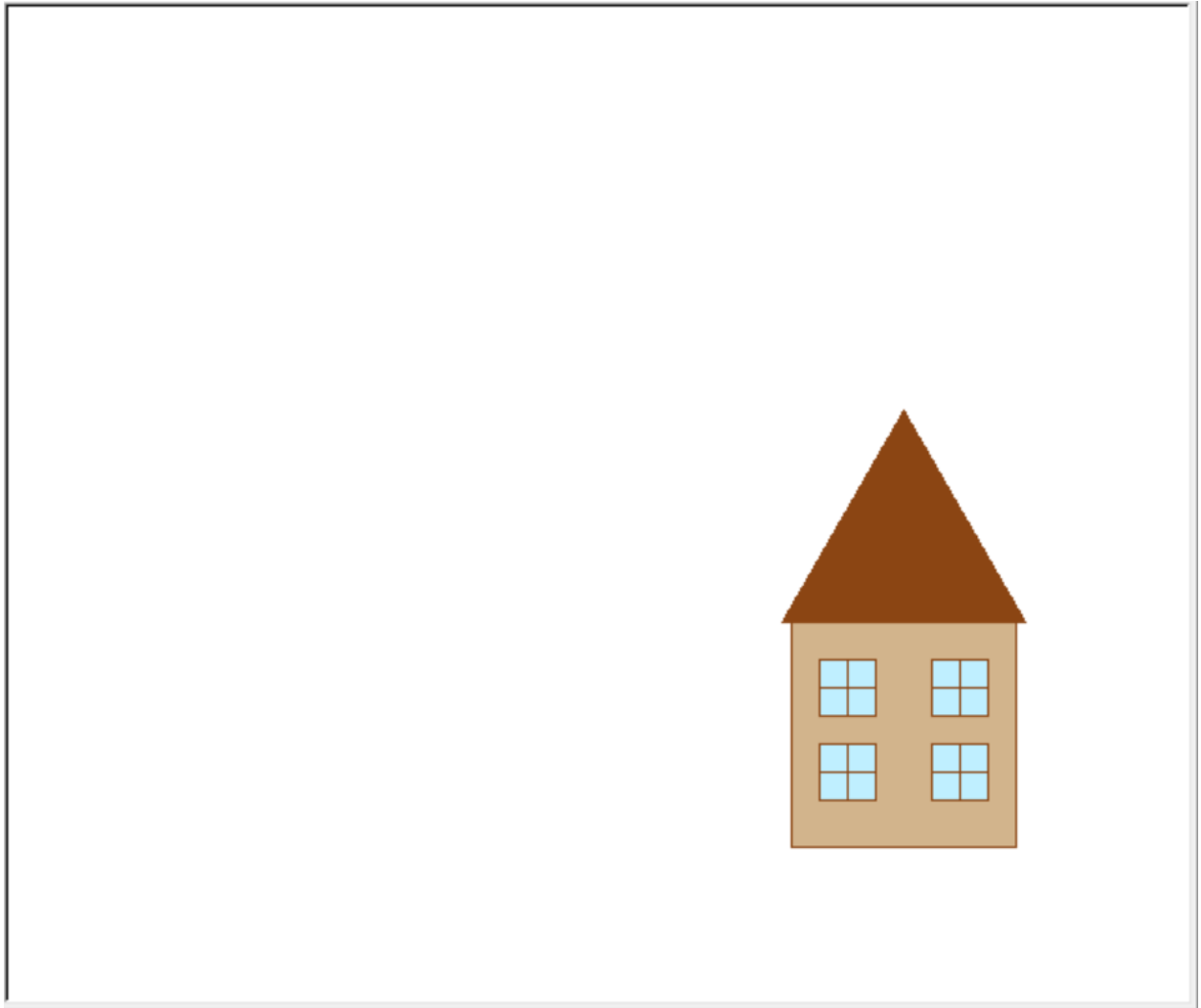
### **Function: drawHouse**

**def** drawHouse():

draw a house with triangle roof and windows

An example calling drawHouse()





## **Function: main**

**def main():**

    Call functions to draw sky, landscape and house.