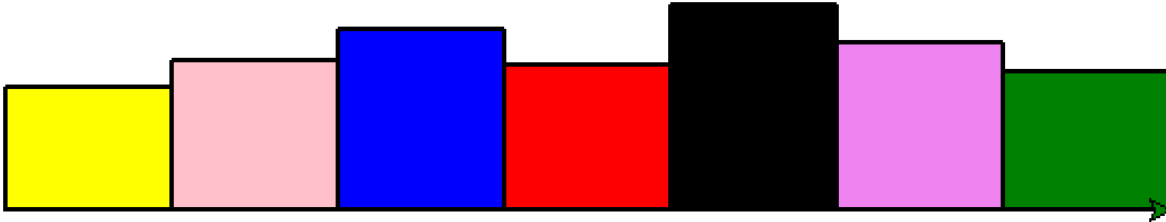day35 bar graph
Due: Monday 11/13/23

Today you will use turtle to make a bar graph like this:

You will write a function that draws a box.

You will use a random number to set the height of each box.

You will make a list containing 7 colors, and then loop through that list, drawing the bar graph.

For extra credit, write the height as a percentage below each bar.

Steps:

1. Create a repl that is Python with Turtle.

2. Put "from turtle import *", along with "import random" at the top.

3. Write a function that draws a box with a fixed width (75) but a variable height and color. Start it like this:

   ```
   def drawBox(height,mycolor):
   ```

   The function draws a rectangle shape like this:

   forward(75)
   left(90)
   forward(height)
   left(90)
   … and so on

   to achieve the following box image shown to the right. Start on the red circle, end on the yellow circle.
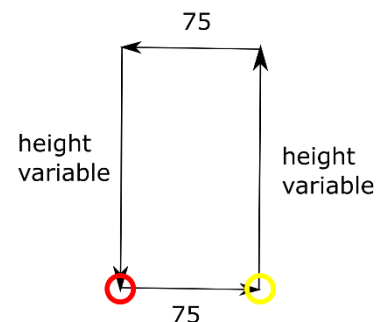
   Use the command `color("black",mycolor)` before you start drawing the rectangle. Use a "`begin_fill()`" command before you start drawing the box and use an "`end_fill()`" command when you are done.

4. Below the function, fully unindented to the left, create a list of colors that contains 7 colors. You have to put them in quotes like this:

```
theColors = ["pink","green"...]
```

5. Put a penup() call in. Add "goto(-250,0). Set the pensize to 2. Add a pendown() call.

Use a **for loop** to go through all the colors. (for c in theColors:). Inside the for loop call the drawBox function one time each with a random height value between 50 and 100 and the next color in your list (c).

If your program doesn't run properly, now is the time to try to debug. Ask for help.

Each time you run the program you'll get a different set of bar graphs. Enjoy the colorful bounty.

Optional extra credit: under each box print the % (that is, the height value) with a % sign below each box like this: