**Unit 5:** Data Structures

**Lab 1: Tuples Optional Extension (+10 EC)**

| **Name:** |  | | |
| --- | --- | --- | --- |

| **Modify** the final program you wrote in the U5L1 lab where the user provides two coordinates to *instead* ask the user *how many points they want* drawn, and then have your program randomly generate thay many coordinates and draw them in a connected fashion.  You should copy/paste and use the random\_coord function below from the class demo in your program to generate each random coordinate; **feel free to modify the -150 and 150 values to choose a different range of possible points:**   | def random\_coord():  x = random.randint(-150, 150)  y = random.randint(-150, 150)  coord = (x, y) # create tuple from x and y  return coord | | --- |   Each line segment should be a randomly generated color (using your random\_RGB function) and you can decide whether to print each coordinate or not.  When the program is done drawing all points and line segments, write the *total distance* of all line segments added up.  **SAMPLE INPUT/OUTPUT:** | |
| --- | --- | --- |
| **Copy/paste your full program code below:** | |

**Done!**

Submit in Google Classroom

