Back in the early days of small computers, one of the first small games that was written was called “Hunt the Hurkle” (not to be confused with “Hunt the Wumpus” which was a similar small game). A hurkle is a creature that hides at random in one cell of a large two-dimensional grid. The user has a small number of guesses to find the hurkle. If the guess is incorrect, the hurkle will tell the user to “Go northwest”, “go south”, “go southeast”, etc. If the guess is correct, the hurkle says “You caught me!” and the game ends. If there are too many incorrect guesses, the hurkle says “I got away!” and the game ends.

The first part of the program needs to select the position, at random, of the hurkle in the grid. The grid is 100×100, so you need to pick the X position of the hurkle at random from 0 to 99, and the Y position at random from 0 to 99 as well. Location <0,0> is the upper left corner of the grid, and <99,99> is the lower right corner of the grid. You’ll need to add the statement `import random` at the start of the program (see page 261 of the Companion for a list of random-number functions).

The user has no more than six guesses to find the hurkle. The following is a “pseudocode” version of the program you are to write. You will need to translate the pseudocode into Python and flesh out some of the more ambiguous parts.

Pick the X,Y location of the hurkle at random
Guess = 0
Found = False

while (Guess < 6) and not Found
    Add 1 to Guess
    Ask the user for the X,Y of the guess
    if the X,Y guess matches the X,Y location then
        Found = True
    else
        tell the user which way to go (North, Northeast, East, etc.)

if Found then
    Say “You caught me!”
else
    Say “I got away!”

When your program is complete, and has been thoroughly tested submit it through the on-line form as Lab #1. Do not turn it in until it works completely; a non-working program will receive zero points.