

EECE.2160: ECE Application Programming

Programming Assignment #4: The “Drunken Sailor” Problem

Figures

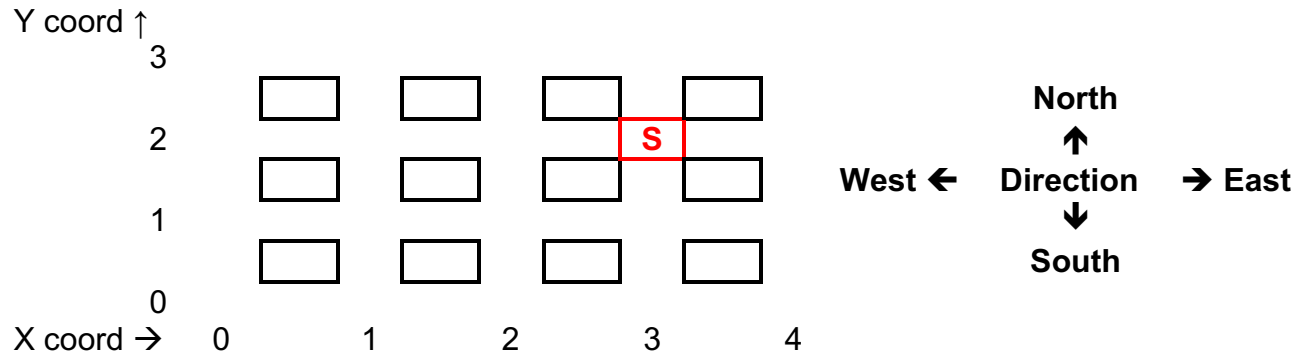


Figure 1: A 4 x 3 city ($M = \# \text{ X blocks} = 4$, $Y = \# \text{ Y blocks} = 3$), with the sailor at position (3, 2). The sailor can be at any (X,Y) position where $0 \leq X \leq M$ and $0 \leq Y \leq N$. The sailor must start inside the border, with the border defined as any position where $X == 0$, $Y == 0$, $X == M$, or $Y == N$.

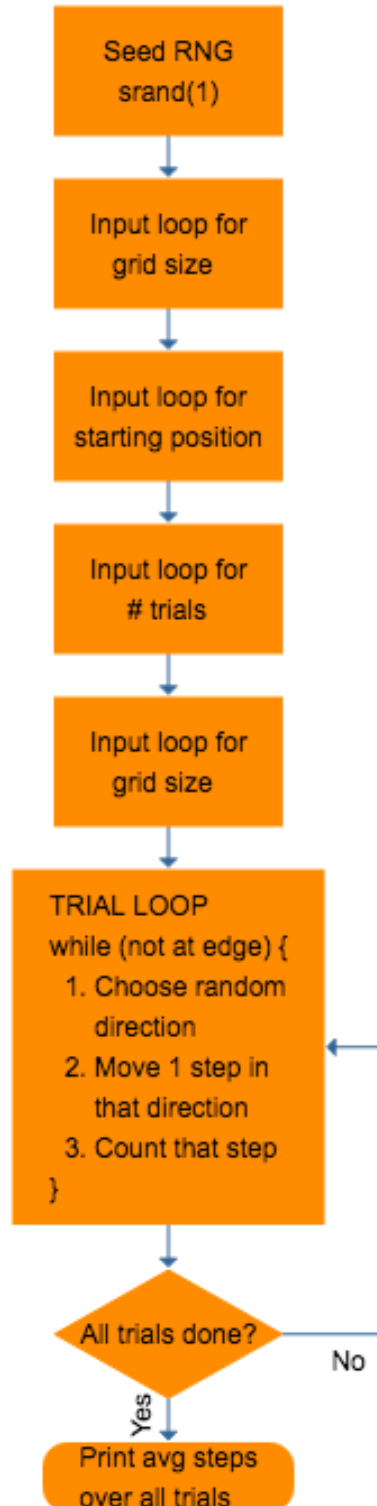


Figure 2: General program flowchart discussed in class. Note that the “trial loop” is a while or do-while loop that runs until the sailor reaches the edge, and, as shown by the decision block near the bottom of the flowchart, that “trial loop” should be inside a for loop that iterates over the total number of trials.