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Section: 09

CSE 461 Quiz 3

(1) (a) Visual homing is used. The robot moves straight if the goal is visible. Otherwise, the robot moves randomly if the goal is not visible.

(b) ~~The robot moves straight until and to find unknown places which have adjacent empty cells.~~

(b) The robot moves straight and marks known places as either empty/occupied. If there is no obstacle, the robot marks the <sup>unknown</sup> cells as empty and if there is an obstacle, then the robot <sup>marks</sup> the <sup>unknown</sup> cells as occupied. Using frontier, the robot chooses those unknown cells which have adjacent empty cells, reducing the steps to reach its goal. This procedure continues upto all the ~~p~~ cells of the grid are known.