Int board[n, n];

Int horizontalDir = 0; //1 for right, -1 for left

Int verticalDir = 0; //1 for right, -1 for left

Int presentLocation = [n/2,n/2];

Int xLocationHopper;

Int yLocationHopper;

Int distance;

void changeDir(int locationHopper, int presentLocation, int direction)

{

distance = locationHopper – presentLocation[0];

if (!distance)

{

If (distance < 0)

direction = -1;

Else

direction = 1;

}

}

Move (int locationHopper, int presentLocation, int direction, int VH)

{

While(locationHopper != presentLocation)

{

If(direction == 1) // go forward

{

If(VH)

//direct motors to move forward

Else

//direct motors to move to the right

}

Else if (direction == -1)

{

If (VH)

//direct motors to go backwards

Else

//direct motors to the left

}

}

}