

$\text{\texttt{\$robot_width=2}}$

$\text{\texttt{\$robot_length=3}}$
 $\text{\texttt{\$=3}}$



Create Mask

$\text{\texttt{\$robot_mask=}}$

```
[[ x, F ],
 [ F, F ],
 [ F, F ]]
```

Rotate Mask 45°
 (+ Interpolation)
 + Point Reflection

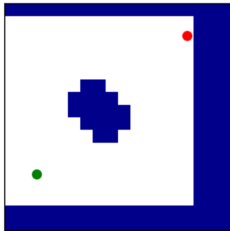
$\text{\texttt{\$robot_mask_45deg=}}$

```
[[ T, F, T, T ],
 [ F, F, F, T ],
 [ T, F, F, x ],
 [ T, F, T, T ]]
```

Apply on
Borders

Apply on
Obstacles

$\text{\texttt{\$expanded_occupancy_grid_45deg=}}$



$\text{\texttt{\$occupancy_grid=}}$

```
[[ T, T, T, T, T, T, T, T, T, T, T ],
 ...
 [ T, T, F, T, T, T, T, T, T, T, T ],
 [ T, ... T, F, F, F, T, T, T, ... T, F, T ],
 [ T, T, T, F, F, x, F, T, ... F, F, F ],
 [ T, T, T, T, F, F, F, T, ... T, F, F ],
 [ T, T, T, T, T, T, T, T, ... T, T, F ],
 ...
 [ T, T, T, T, T, T, T, T, ... T, T, T ]]
```