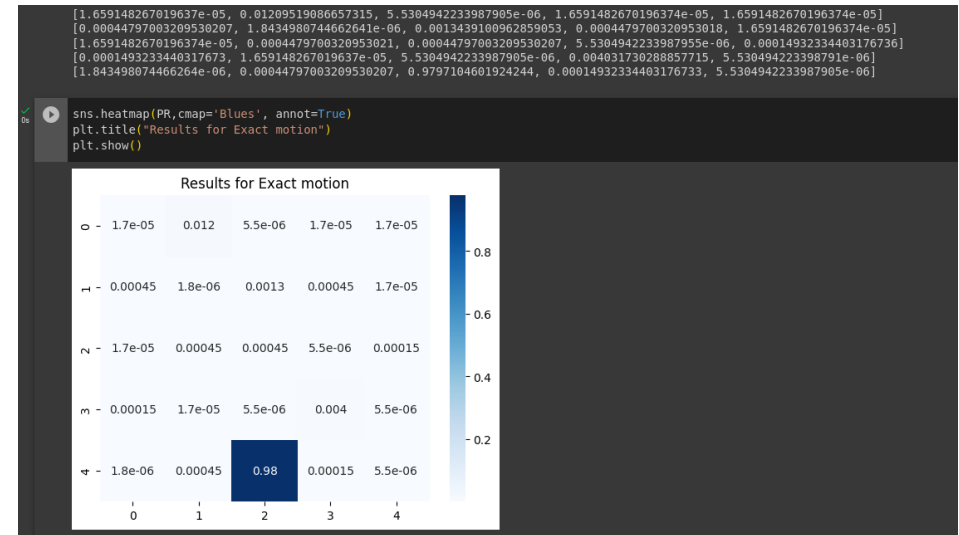Simple Mobile Robot World (2D Grid) Consisting of 25 Cells

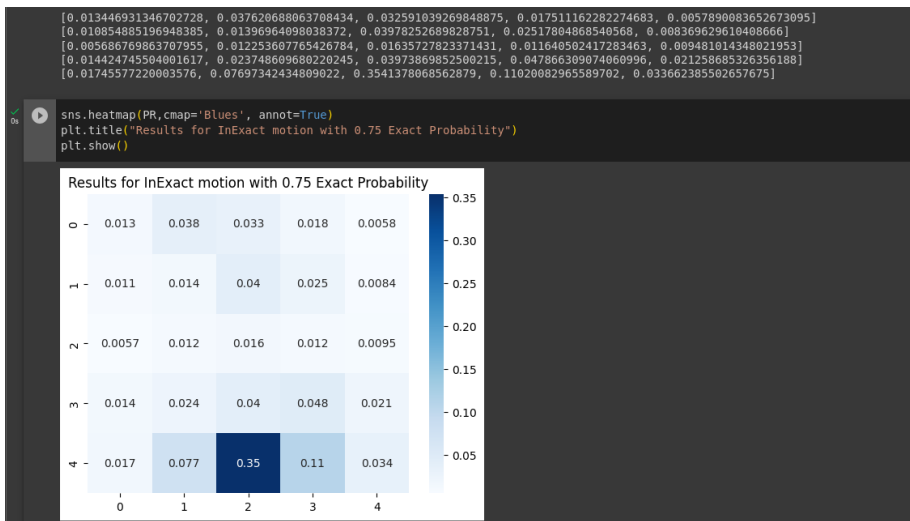**Assumptions for this Statistics:**
Robot Starting with equal probability of all cells
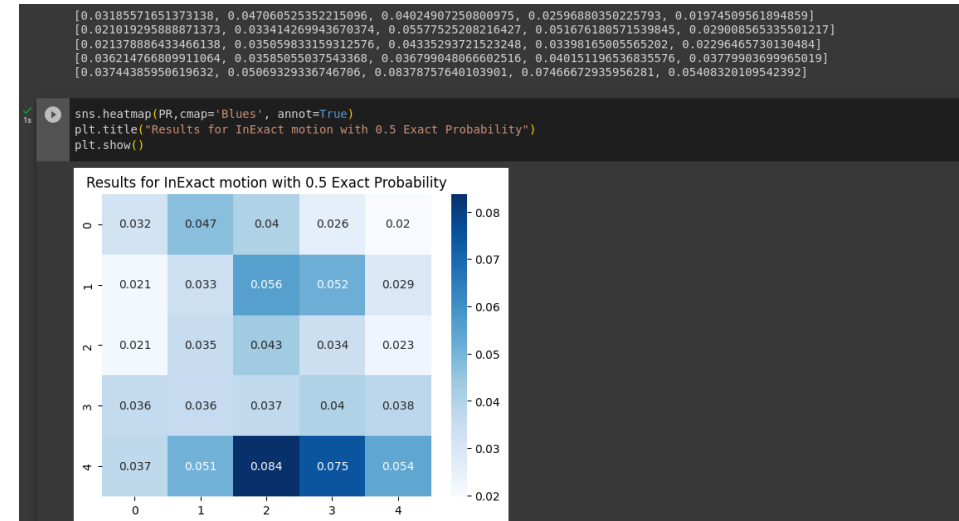Sensing system provides 60% Correct input
(Under/Over)Shoot including only the 2 neighbouring cells of the motion direction

[1.659148267019637e-05, 0.01209519086657315, 5.5304942233987905e-06, 1.6591482670196374e-05, 1.6591482670196374e-05]
[0.0004479700320953018, 1.8434980744662641e-06, 0.0013439100962859053, 0.000447970320953018, 1.6591482670196374e-05]
[1.6591482670196374e-05, 0.0004479700320953021, 0.0004479700320953018, 5.5304942233987955e-06, 0.00014932334403176736]
[0.0001493233440317673, 1.659148267019637e-05, 5.5304942233987905e-06, 0.004031730288857715, 5.530494223398791e-06]
[1.843498074466264e-06, 0.00044797003209530207, 0.9797104601924244, 0.00014932334403176733, 5.5304942233987905e-06]

```
sns.heatmap(PR,cmap='Blues', annot=True)
plt.title("Results for Exact motion")
plt.show()
```


Exact Motion with result of 98% of the correct cell

[0.013446931346702728, 0.037620688063708434, 0.032591039269848875, 0.017511162282274683, 0.0057890083652673095]
[0.010854885196948385, 0.01396964098038372, 0.03978252689828751, 0.0251780486540568, 0.008369629610408666]
[0.005686769863707955, 0.012253607765426784, 0.01635727823371431, 0.011640502417283463, 0.009481014348021953]
[0.01442474554001617, 0.023748609680220245, 0.03973869852500215, 0.047866309074060996, 0.02125868532635618]
[0.01745577220003576, 0.07697342434809022, 0.3541378068562879, 0.11020082965589702, 0.033662385502657675]

```
sns.heatmap(PR,cmap='Blues', annot=True)
plt.title("Results for InExact motion with 0.75 Exact Probability")
plt.show()
```


InExact Motion with Exact probability of 0.75 and result of
35% of the correct cell

[0.03185571651373138, 0.047060525352215096, 0.04024907250800975, 0.02596880350225793, 0.01974509561894859]
[0.021019295888871373, 0.033414269943670374, 0.05577525208216427, 0.051676180571539845, 0.029008565335501217]
[0.021378886433466138, 0.035059833159312576, 0.04335293721523248, 0.03398165005565202, 0.02296465730130484]
[0.036214766800911064, 0.03585055037543368, 0.036799048066602516, 0.040151196536835576, 0.037799043699965019]
[0.037443859506619632, 0.05069329336746706, 0.08378757640103901, 0.07466672935956281, 0.05408320109542392]

```
sns.heatmap(PR,cmap='Blues', annot=True)
plt.title("Results for InExact motion with 0.5 Exact Probability")
plt.show()
```


InExact Motion with Exact probability of 0.5 and result of
8.4% of the correct cell