

```
A5)array([[21.97748529, 24.4194281 , 21.97748529, 19.4194281 ,
17.47748529],
[16.02158677, 21.97748529, 19.77973676, 17.80176308, 16.02158677],
[17.80176308, 19.77973676, 17.80176308, 16.02158677, 14.4194281 ],
[12.97748529, 17.80176308, 16.02158677, 14.4194281 , 12.97748529],
[14.4194281 , 16.02158677, 14.4194281 , 12.97748529, 11.67973676]])
```

```
A2)array([[ 3.30899634,  8.78929186,  4.42761918,  5.32236759,
1.49217876],
[ 1.52158807,  2.99231786,  2.25013995,  1.9075717 ,  0.54740271],
[ 0.05082249,  0.73817059,  0.67311326,  0.35818621, -0.40314114],
[-0.9735923 , -0.43549543, -0.35488227, -0.58560509, -1.18307508],
[-1.85770055, -1.34523126, -1.22926726, -1.42291815, -1.97517905]])
```

A6)Convergence in Policy Iteration:

```
[[ 0.          -13.90085451 -19.85308423 -21.83559257]
[-13.90085451 -17.8705759  -19.854067  -19.85308423]
[-19.85308423 -19.854067  -17.8705759  -13.90085451]
[-21.83559257 -19.85308423 -13.90085451  0.          ]]
[[ 0. -1. -2. -3.]
[-1. -2. -3. -2.]
[-2. -3. -2. -1.]
[-3. -2. -1.  0.]]
[[ 0. -1. -2. -3.]
[-1. -2. -3. -2.]
[-2. -3. -2. -1.]
[-3. -2. -1.  0.]]
```

Convergence in Value Iteration:

```
[[0. 0. 0. 0.]
[0. 0. 0. 0.]
[0. 0. 0. 0.]
[0. 0. 0. 0.]]
[[ 0. -1. -1. -1.]
[-1. -1. -1. -1.]
[-1. -1. -1. -1.]
[-1. -1. -1.  0.]]
[[ 0. -1. -2. -2.]
[-1. -2. -2. -2.]
[-2. -2. -2. -1.]
[-2. -2. -1.  0.]]
[[ 0. -1. -2. -3.]
[-1. -2. -3. -2.]
[-2. -3. -2. -1.]]
```

```
[-3. -2. -1.  0.]
```