ECEN 689-605/700 Dependable Learning Systems Fall 2018
Homework 1 Solution

1. Value iteration
   5 iterations V(s1)=0.4398, V(s2)=0.5126, V(s3)=0.4357. For all states, actions are a1 according to the policy.

2. Gauss-Seidel
   5 iterations V(s1)=0.4506, V(s2)=0.5242, V(s3)=0.4483. For all states, actions are a1 according to the policy.

3. Dynamic programming
   V(s1)=0.9357, V(s2)=1.0022, V(s3)=0.9210. For all states, actions are a1 according to the policy.

Due to different setup, you may get different results. But they should be close to the above. Also, the values from Gauss-Seidel should be greater than those from value iteration. Dynamic programming should obtain the largest values, as discount factor is not used.