```
 1 /Users/ryanwu/Project2/bin/python /Users/ryanwu/
   Documents/CMU/24-677 Modern Control Theory/Project/
   Project2/Q1.py
 2 At 2 m/s:
 3 Rank of controllability matrix P: 4, Controllable:
   Yes
 4 Rank of observability matrix Q: 4, Observable: Yes
 5 =========================================================
   ====
 6 At 5 m/s:
 7 Rank of controllability matrix P: 4, Controllable:
   Yes
 8 Rank of observability matrix Q: 4, Observable: Yes
 9 =========================================================
   ====
10 At 8 m/s:
11 Rank of controllability matrix P: 4, Controllable:
   Yes
12 Rank of observability matrix Q: 4, Observable: Yes
13 =========================================================
   ====
14
15 Process finished with exit code 0
16
```