

Task 1

The utilities is slightly off. Primarily in the bottom right corner of the results. The policy looks to be correct. I am still combing through my code to see if I can find a bug that would be causing this.

```
AgentModel_Q_Learning("environment2.txt", -0.01, 0.99, 10000, 1000)
```

utilities:

```
0.908 0.932 0.946 1.000
0.893 0.000 0.851 -1.000
0.872 0.846 0.854 0.845
```

policy:

```
> > > o
^ x < o
^ < ^ <
```

Active Q-Learning took 0.16 seconds to run.

```
AgentModel_Q_Learning("environment2.txt", -0.04, 0.9, 3000000, 50000)
```

utilities:

```
0.518 0.659 0.806 1.000
0.406 0.000 0.598 -1.000
0.311 0.343 0.445 0.307
```

policy:

```
> > > o
^ x ^ o
^ > ^ <
```

Active Q-Learning took 50.12 seconds to run.