

## Task 1

I know my results are wrong. I'm trying to find the bug in my code but I haven't found it in the past 4 or so hours. I'm submitting this in the hopes to get some partial credit in case I can't find the bug later.

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

utilities:

```
0.254 0.402 0.678 1.000
0.239 0.000 0.646 -1.000
0.226 0.239 0.480 -0.010
```

policy:

```
^ ^ ^ o
^ x ^ o
^ ^ ^ ^
```

Active Q-Learning took 0.15 seconds to run.

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

utilities:

```
0.481 0.617 0.758 1.000
0.372 0.000 0.087 -1.000
0.252 -0.024 0.022 -0.038
```

policy:

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

Active Q-Learning took 49.70 seconds to run.