

# Autonomous Agents 1

## Assignment 1

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### Implementation

The current implementation consists of the following classes:

**Predator**

**Prey**

**Environment**

**Game**

### Analysis

**Simulator for the environment**

Avarage run time	Standard deviation
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**Iterative policy evaluation**

Predator	Prey	Value	Discount Factor	Iterations to converge
(0, 0)	(5, 5)		0.8	
(2, 3)	(5, 4)		0.8	
(2, 10)	(10, 0)		0.8	
(10, 10)	(0, 0)		0.8	

**Policy iteration**

Discount Factor	Iterations to converge
0.1	
0.5	
0.7	
0.9	

## Value iteration

Discount Factor	Iterations to converge
0.1	
0.5	
0.7	
0.9	

## Smarter state-space encoding

## Conclusion

## Files attached

## Sources