**Pre Quiz Questions**

1. What is an algorithm?
2. What is artificial intelligence?
3. What technological devices and products utilize artificial intelligence?
4. Are computers smarter than humans, explain your answer?
5. Are computers or human better at processing data?
6. Are computers or human better at decision making in real time?
7. Can you create an algorithm without knowing the end goal or scenario in which you are acting? Explain.

(Consider this when explaining your answer – is the activity an isolated activity? Example, trying to make a basketball shot on your own vs. trying to make a shot in a game with four other teammates and a defense on the court).

**Assignments**

* Read Introduction Chapter
* Read Game Tutorial
* View Game Video Tutorial
* Play Micro-RTS
* Define an algorithm for playing grid of 8 squares across horizontally and 8 squares down vertically that will move a unit on the playing grid from one location on the grid to another location on the grid.
* Define an algorithm for playing grid of 8 squares across horizontally and 8 squares down vertically that will provide guidance to a unit on the playing grid to roam and guard random regions on the grid.
* Describe the difference between traditional AI and Game AI

**Post Quiz**

What are the limitations when using AI in real time game play such as Micro-RTS?

How does using a history table such as the one used in Q-Learning improve this limitation?

Are computers smarter than humans, explain your answer?

Are computers or human better at processing data?

Are computers or human better at decision making in real time?

**Real World Application:**

Provide a scenario in which AI could be thrown off by an unexpected interruption?

How could using a history table such as the one used in Q-Learning improve the AI’s ability to handle this unexpected interruption?