* **Analyze the differences between human and machine approaches to solving problems.**

A human’s approach to solving problems is vastly different from that of a machine. Humans strongly rely upon past experiences, intuition, knowledge, and observation when solving problems. Humans tend to use their senses when solving problems, something a machine doesn’t have. Human’s will use tactics like peeking around corners, listening to their surroundings and if we hit a dead end, we can turn around whereas a machine can’t. While we are creatures of habit, humans will take the path of least resistance given the opportunity. The only mechanism machines have it to keep playing over and over and storing the results in a database so predictions are more accurate.

* **Assess the purpose of the intelligent agent in pathfinding.**

The difference between exploration and exploitation is that during exploration the agent will make random moves whereas in exploitation the agent with the help from an algorithm predict the next best possible move given the state of the environment. The ideal exploration rate is around 20%. Reinforcement learning helps the agent by the way positive and negative rewards, the overall goal is to achieve the highest possible reward.

* **Evaluate the use of algorithms to solve complex problems.**

Q-learning was implemented in this game using neural networks to make predictions for the next move. Given the win percentage the machine would either move randomly or make a prediction. So the implementation of the Q-learning into the game is the agent would make a move, the algorithms would then evaluate the move and measure the reward and then update Q. Each move would update the Q value thus making the predictions more accurate.