**Homework # 4 Report**

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In this project I have implemented a program that can learn to play the Dots-And-Boxes game. The learning can take place in one of two ways :

1. **Through the use of Q-Tables** :- A Q-table is a table that stores the Q-value for every state and action in the game. The Q-value is computed and updated to the table every time a box is completed, or the game is won. A reward of +1 is assigned every time a box is completed and +5 every time a game is won.
2. **Through a Function Approximation** :- This is a function or model that closely tries to match a target function or model based on the task assigned to it.