Programming Assignment 2

**Group Member Contribution**

All members equally contributed to each part of the assignment as we all peer reviewed and contributed code along all parts of the assignment equally.

***Results from testing the algorithms in part II***

**Algorithm 1: Uniform Random (UR)**

**A screenshot of a computer

Description automatically generated**

A screen shot of a computer

Description automatically generatedTesting File Result

**Algorithm 2: Pure Monte Carlo Game Search (PMCGS)**

A screenshot of a computer

Description automatically generatedA computer screen shot of a code

Description automatically generated Testing File Result

**Algorithm 3: Upper Confidence bound for Trees (UCT)**

A screenshot of a computer

Description automatically generatedA computer screen shot of a code

Description automatically generated Testing File Result

***Part II: Algorithm Tournaments and Evaluation***

**A screenshot of a computer program

Description automatically generatedTournament Results**

**Tournament data table**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **UR** | **PMCGS (100)** | **PMCGS (200)** | **UCT (100)** | **UCT (200)** |
| **UR** | 0% | 1% | 1% | 5% | 9% |
| **PMCGS (100)** | 99% | 0% | 44% | 83.5% | 89.5% |
| **PMCGS (200)** | 99% | 56% | 0% | 91% | 91% |
| **UCT (100)** | 95% | 16.5% | 9% | 0% | 50% |
| **UCT (200)** | 92% | 10.5% | 9% | 50% | 0% |