## **Experiment 2**

Set 1:

Player 1 = "mct\_modified" with 1000 nodes Player 2 = "mct\_vanilla" with 1000 nodes

Time: ~29 minutes

```
The 1 bot wins this round! ({1: 1, 2: -1})

Final win counts: {'draw': 0, 1: 65, 2: 35}
1766.981443583034 seconds
```

Modified has a higher win rate than vanilla, which means that modified seems to play much better than vanilla.

Set 2:

Player 1 = "mct\_modified" with 100 nodes Player 2 = "mct\_vanilla" with 100 nodes

Time: ~3 minutes

```
The 1 bot wins this round! ({1: 1, 2: -1})

Final win counts: {'draw': 1, 1: 59, 2: 40}
199.16705654235557 seconds
```

With fewer nodes, modified still has a higher win rate than vanilla, but the modified's win rate has slightly decreased.

Set 3:

Player 1 = "mct\_modified" with 1500 nodes Player 2 = "mct\_vanilla" with 1500 nodes

Time: ~43 minutes

```
<u>Final</u> win counts: {'draw': 0, 1: 61, 2: 39} 2588.1206077500246 seconds
```

With even more nodes, modified still has a higher win rate, but still less than when the nodes were at 1000.