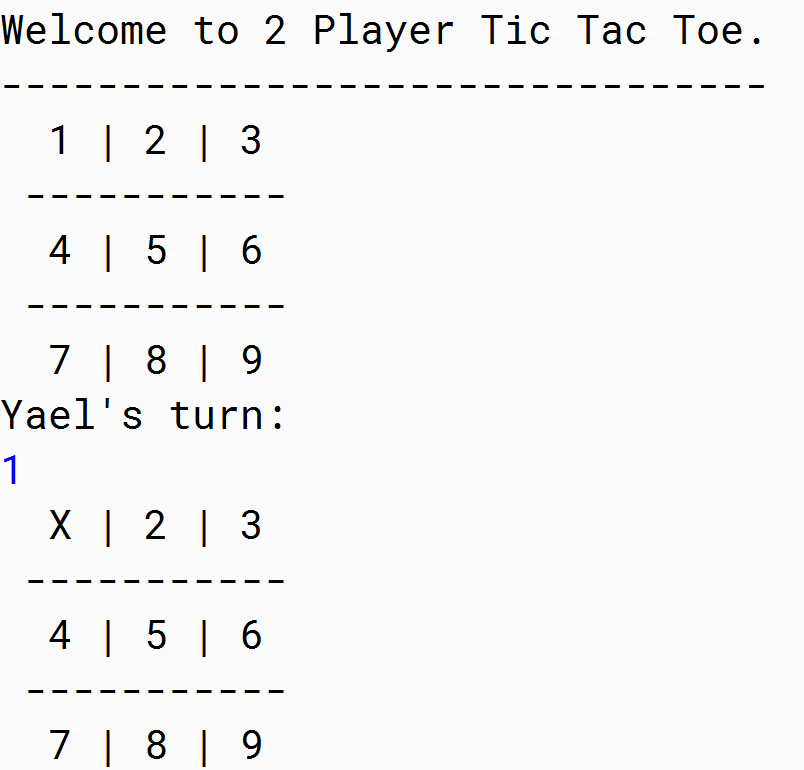
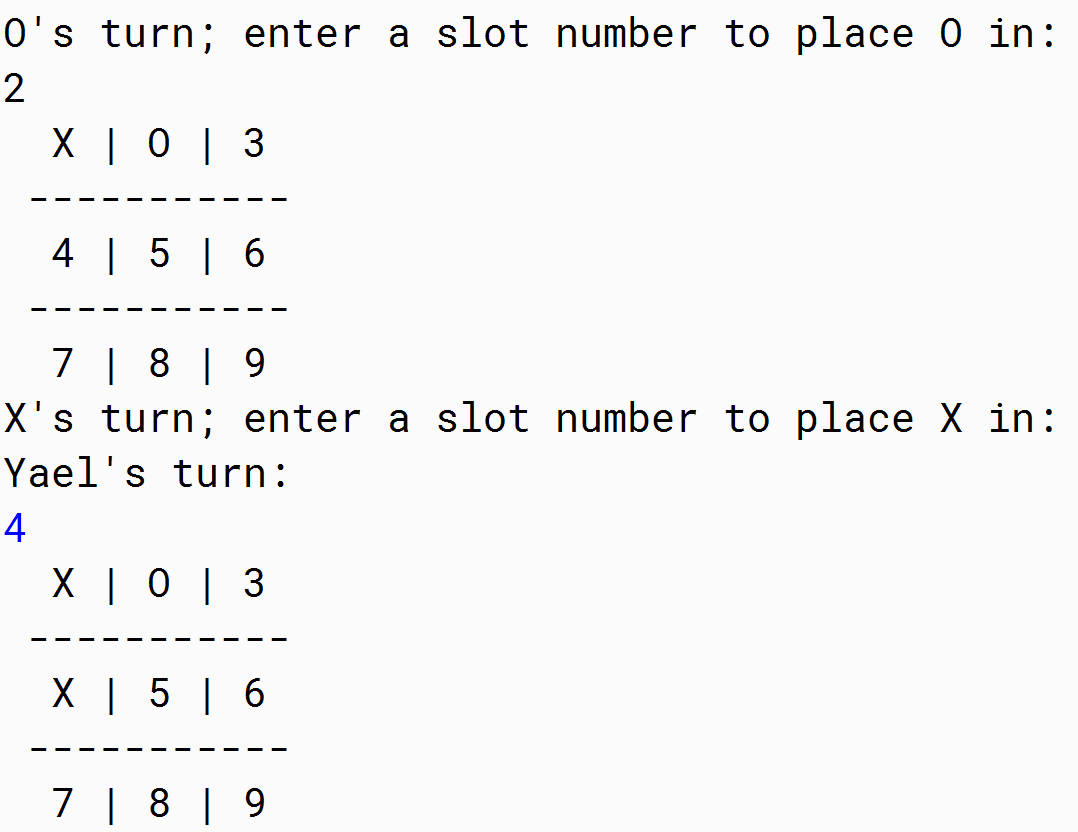
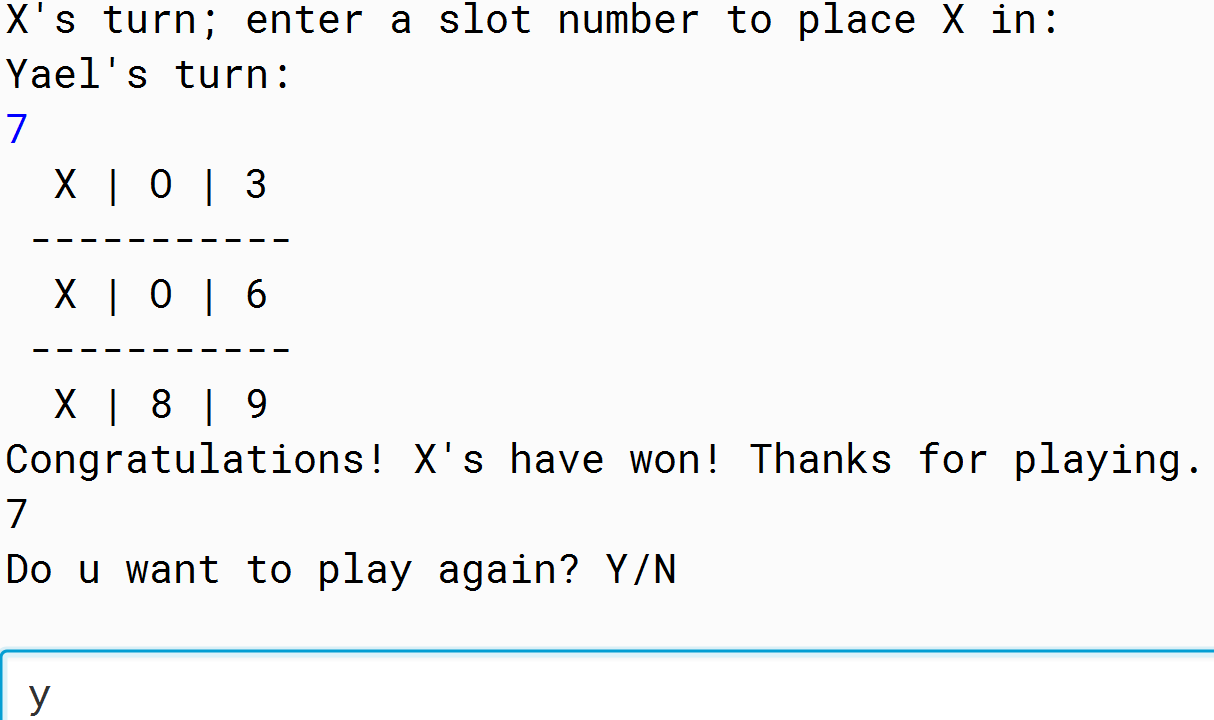
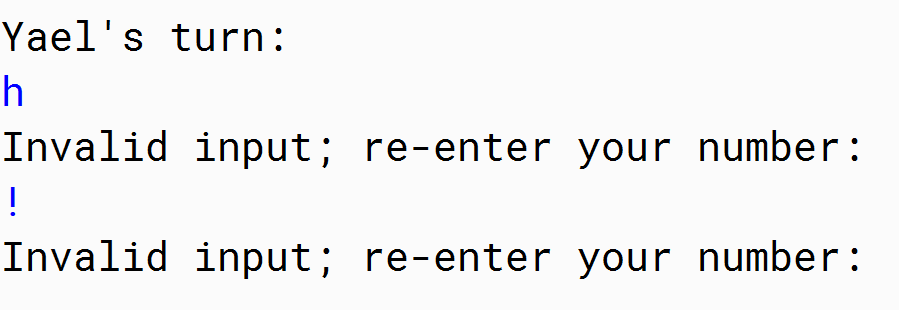
**Usual Case:**

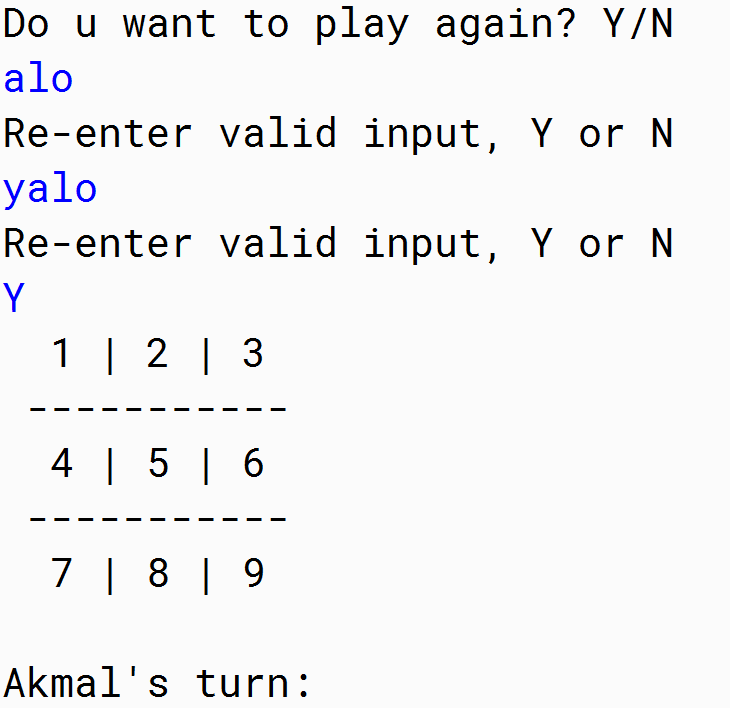






**Invalid Input:**





**Sorted Leaderboard:**

