Phase 1

Objective: An agent play trick taking games such as Hearts, Spades, and Bridge.

Approach:

Considering roughly two data structures, viz. MyCardsList (containing element the agent has) and ActiveList (containing elements that are on table for current round, which can contain from 0 to 3 elements for 4 player game.)

Game moves:

1. If the agent is first player, i.e., the ActiveList has 0 elements and the agent has an ace of any suite, it will randomly select from that suite and play the ace - PlayfirstHighest()
2. If the agent doesn’t have ace, it will play any random card from lowest to second highest card that it has - playRandom().
3. If there is 1 element in ActiveList, if agent don’t have the largest card of any suite or larger than the elements in ActiveList then he plays the least card of the played suite.
4. If the agent has the larger card than the played card, then it compares its larger card with PlayedList and f no other element is larger than the agent’s card, then it plays that card.
5. If the agent doesn’t have a card of played suite, it plays the least card of random suite.- Playdifferentsuite()
6. PlayedList: agent maintains a list containing cards that has been already played. Every time a card is being played, the agent inserts the element in the playedList.
7. Record\_OutOfCards(): If a player P plays a card of different suite S’ from the ones which was on table S, then record player name and the suite he doesn’t have (S, P).