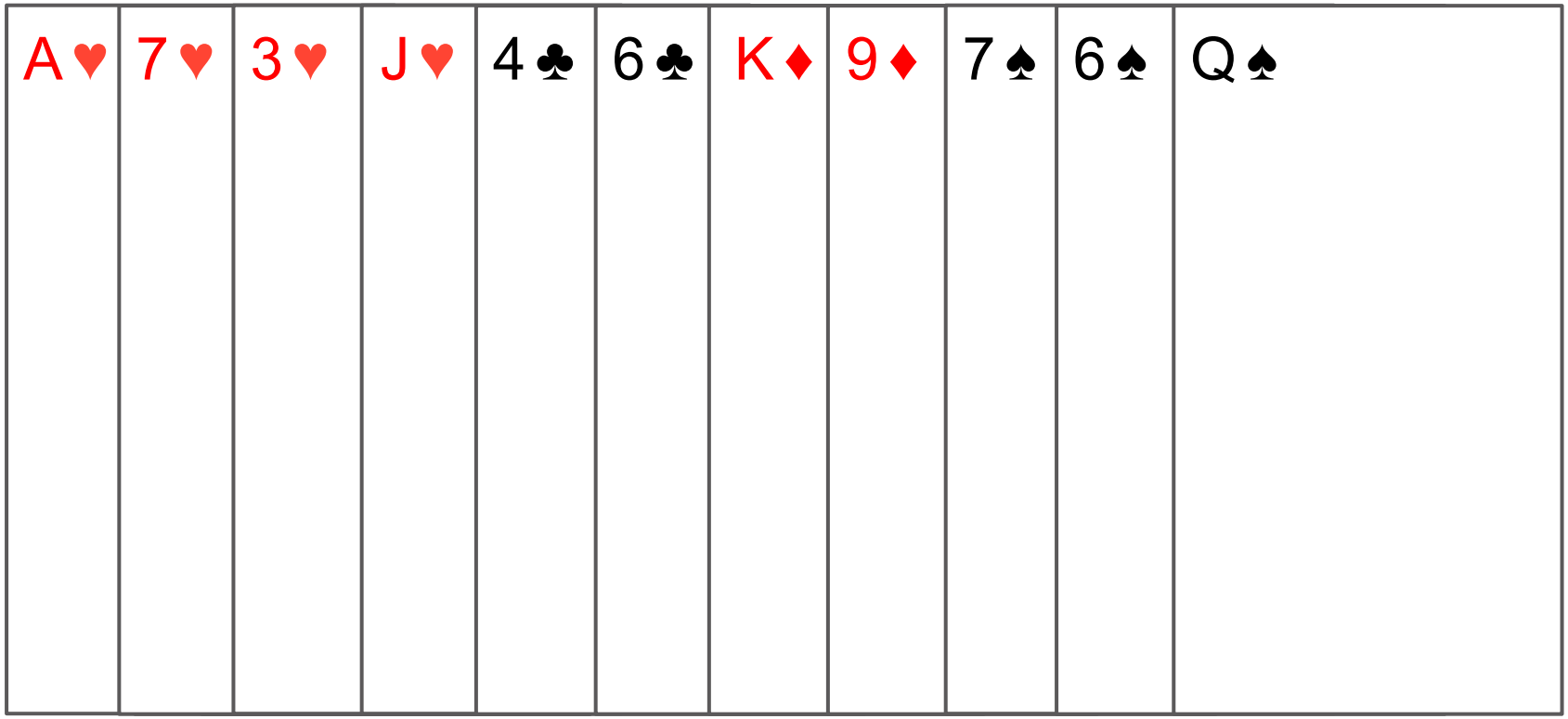
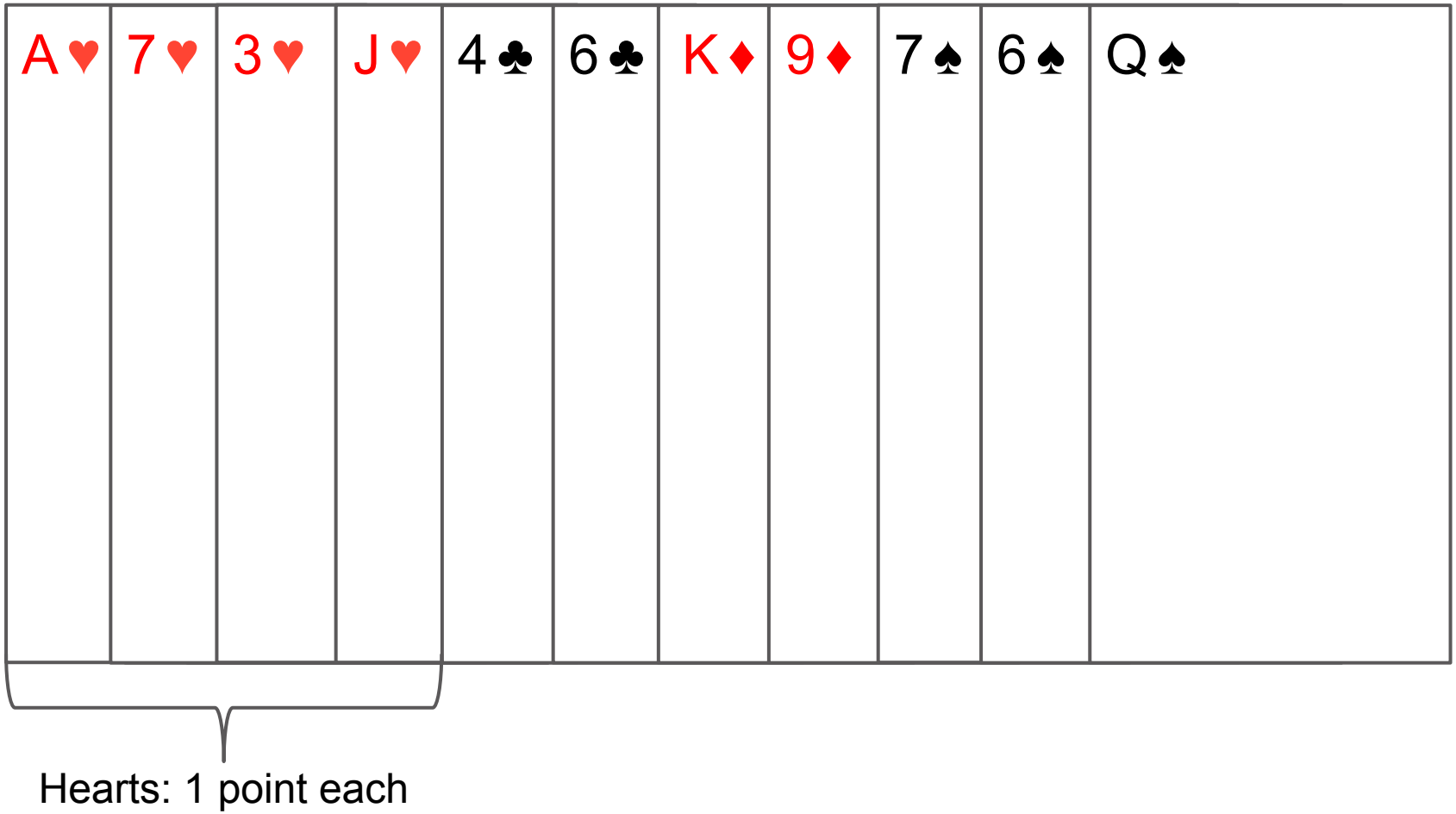
Hearts

Cristian Cibils
(ccibils@stanford.edu)

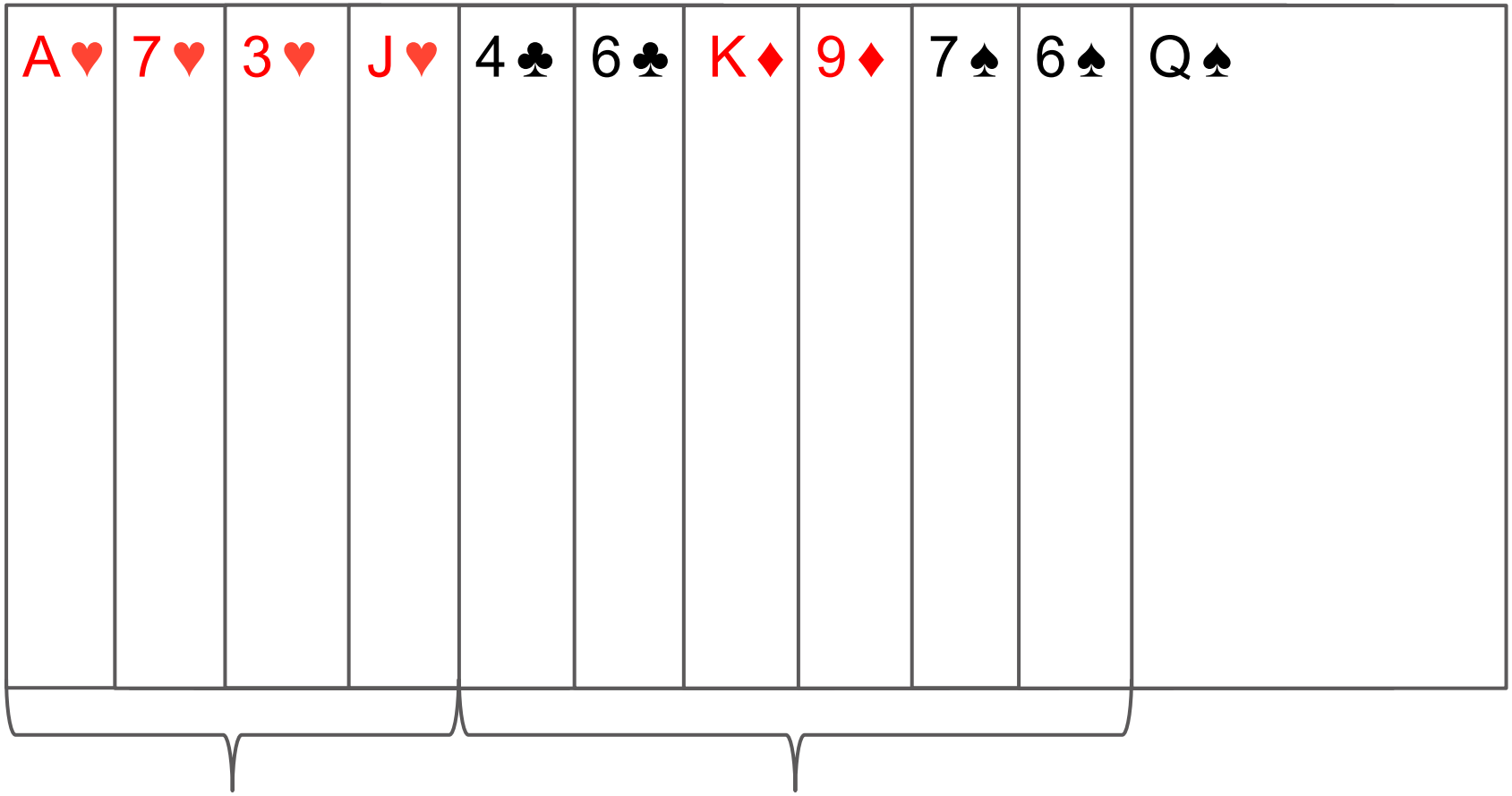
How to Play Hearts



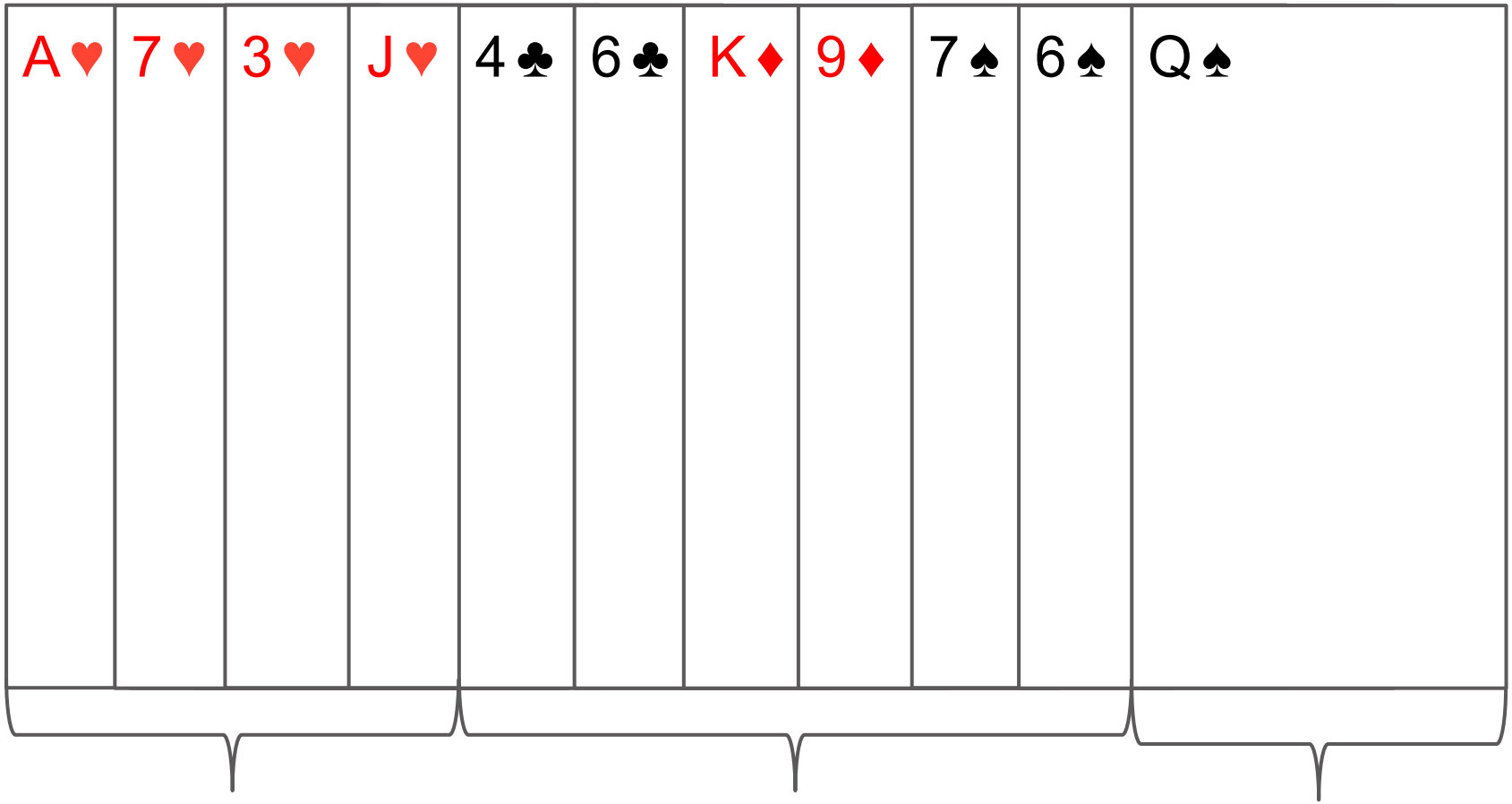
How to Play Hearts



How to Play Hearts



How to Play Hearts



How to Play Hearts

1. Leader plays card
2. Everyone else matches suit if possible
3. Highest value of leader’s suit wins
4. Winner becomes new leader

Key Point

Ordering of players is preserved

- Who goes first changes but play always progresses counter clockwise

Terminology

- Trick: a single event where each player plays a card and the winner takes them
- Round: 13 tricks
- Leader: person who plays first card of the trick
- Match Suit: playing a card of the same suit as the leader

Strategy

- Leader plays the lowest card they have left
- Others plays lowest card possible if they can match suit or highest card otherwise

Quick Enumeration

An **enumerated type** is an int that takes on a specific range and each value has a name

Allows a variable to be a set of predefined constants

Quick Enumeration

```
enum Direction {
   LEFT, //has value 0
   RIGHT //has value 1
};

Direction zoolander = RIGHT;
int n = 2 * zoolander; //n==2
```

Let’s Do It!

Coding Time!

equal_range

Parameters: iterator begin, iterator end, value, bool comparator function

Return: a pair of iterators denoting the begin and end of a range of equal value or end if no range exists

Function: similar to lower_bound from city finder. Finds a range that has a certain value