Note of Poker Instruction

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Instruction

Pick the best hand(s) from a list of poker hands.

See wikipedia for an overview of poker hands.

- Ranking a list of poker hands can be considered a sorting problem.
- Rust provides the sort method for `Vec<T> where T: Ord`.
- `Ord` types form a total order: exactly one of `a < b`, `a == b`, or `a > b` must be true.
- Poker hands do not conform to a total order: it is possible for two hands to be non-equal but has equal sort order. Example: `"3S 4S 5D 6H JH"`, `"3H 4H 5C 6C JD"`.
- Rust provides the `PartialOrd` trait to handle the case of sortable things which do not have a total order. However, it doesn't provide a standard `sort` method for `Vec<T> where T: PartialOrd`. The standard idiom to sort a vector in this case; is `your_vec.sort_by(|a, b| a.partial_cmp(b).unwrap_or(Ordering::{Less|Equal|Greater}));`, depending on your needs.
- You might consider implementing a type representing a poker hand that implements `PartialOrd`.

Let's solve it

List of poker hand

First, let's research the poker games, I didn't play them before. According to Wikipedia, I see a table of hand-ranking categories.

Index	Name	Example	Description
1	Royal flush	10S JS QS KS AS	I think this is the best hand
2	Straight flush	JS 10S 9S 8S 7S	Hand contain five cards of sequential rank and same suite
3	Four of a kind	5C 5D 5H 5S 2D	Hand contain five cards in a rank and a card in other rank
5	Full house	6S 6H 6D KC KH	Hand contain three cards in a rank and two cards in other rank
6	Flush	JD 9D 8D 4D 3D	Hand contain five cards same suite, not all of sequential rank
7	Straight	10D 9S 8H 7D 6C	Hand contain five cards of sequential rank and not all of same suite

Index	Name	Example	Description
8	Three of a kind	QC QS QH 9H 2S	Hand contain one of three cards in same rank
9	Two pair	JS JH 3D 3C 2H	Hand contain two of double card in two other same rank
10	One pair	10S 10H 8D 7C KH	Hand contain two cards in same rank
11	High card	KS QH 7D 4C 3H	Nothing

- Todo-list
  - Determind list card on hand
    * Rank of card
    * Suite of card
  - Sort to categoria