Poker Bot

Goal:

Create a program that can return the probability of poker hand outcomes

Then, can calculate pot odds, and determine whether statistically, a bet is ‘good’ or not.

Will take a poker hand and give the percentile of all possible hand with the given cards

What are your cards:

*gets my\_cards*

my hand: ns, ns

on the table:

Hand Strength: *90% - (as percentile)*

Possible Outs:

Pair: 35%

Trips: 2%

Straight: <1%

Flush: <1%

Full-House: <1%

What was dealt:

*gets flop*

my hand: ns, ns

on the table: ns, ns, ns

Hand Strength: 40% - (as percentile)

Possible Outs:

Pair: 18%

Trips: 1%

Straight: <1%

Flush: 0%

Full-House: <1%

What was dealt:

*gets flop*

my hand: ns, ns

on the table: ns, ns, ns, ns

Hand Strength: 90% - (as percentile)

Possible Outs:

Pair: 100%

Trips: 5%

Straight: 0%

Flush: 0%

Full-House: 3%

What was dealt:

*gets flop*

my hand: ns, ns

on the table: ns, ns, ns, ns, ns

Hand Strength: 40% - (as percentile)

“You have a pair of 6’s”

Class Card

@id = “card id ”

@suit = “suit”

@number = int or :facecard

#id

#number

#suit

Class Game

@@suits = “suits”

@@numbers = “nums as strings”

@deck = []

@my\_hand = []

@table = []

*General methods*

#id\_to\_num(card\_id) = turns card.id into int or :facecard

#id\_to\_suit(card\_id) = turns card.id into “suit”

#new\_game = deck is full, @my\_hand == [] and @table == []

#remove\_card = deletes card from @

*@my\_hand methods*

#i\_have(card\_id) = adds card to @my\_hand

*@table methods*

#table\_has(card\_id) = adds card to @table

#deal\_flop

#deal\_turn

#deal\_river

Class Array

#include\_id?(card\_id) = bool if a card is of the given card\_id

#include\_number?(number) = bool if card.number == number

#include\_suit?(suit) = bool if card.suit == suit

Class Poker

Poker::sort\_by\_num(cards\_arr) = returns an Arr with Cards sorted by num

Poker::sort\_by\_suit(cards\_arr) = returns an Arr with Cards sorterd by suit

Poker::higher\_hand(hand\_1, hand\_2) = returns which hand is stronger, and name of hand

Class Logic

C(n,r) = n!/r!(n-r)!