

# CS 411 F21 HW3

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- 1 Implement quickhull in the language of your choice. Turn in a copy of your source code.
- 1.1 Test using  $n = 10, 100, 1000$ , and  $10000$  2D points randomly distributed inside the unit square. What is your run time for each  $n$ ? (100 points)

Hand	Description	Frequency	Probability	Payout	Return
Straight Flush	3 suited in sequence	288	0.0022	\$100	\$0.22
Three of a Kind	3 of the same rank	312	0.0023	\$99	\$0.23
Straight	3 in sequence (includes AKQ)	4320	0.032	\$9	\$0.29
Flush	3 suited	6576	0.0496	\$5	\$0.25
Pair	2 of the same rank	22464	0.169	\$0	\$0
High Card	None of the above	98640	0.74	\$0	\$0
<b>Total</b>		132600	1.0	\$204	\$0.999457

code: [https://github.com/scifi6546/cs411\\_cards](https://github.com/scifi6546/cs411_cards)