

# Wanna be billionaire? A strategy to beat the roulette

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## I] Introduction

“The households always win”

Is there a strategy to go through the trap of casinos? A strategy that guarantees you to win money

## II] Methods

We have made two simulations of the double down-strategy, each with different budget:

1) Unlimited budget

2) 256\$ budget

Simulation stops after winning 80\$ or losing the budget

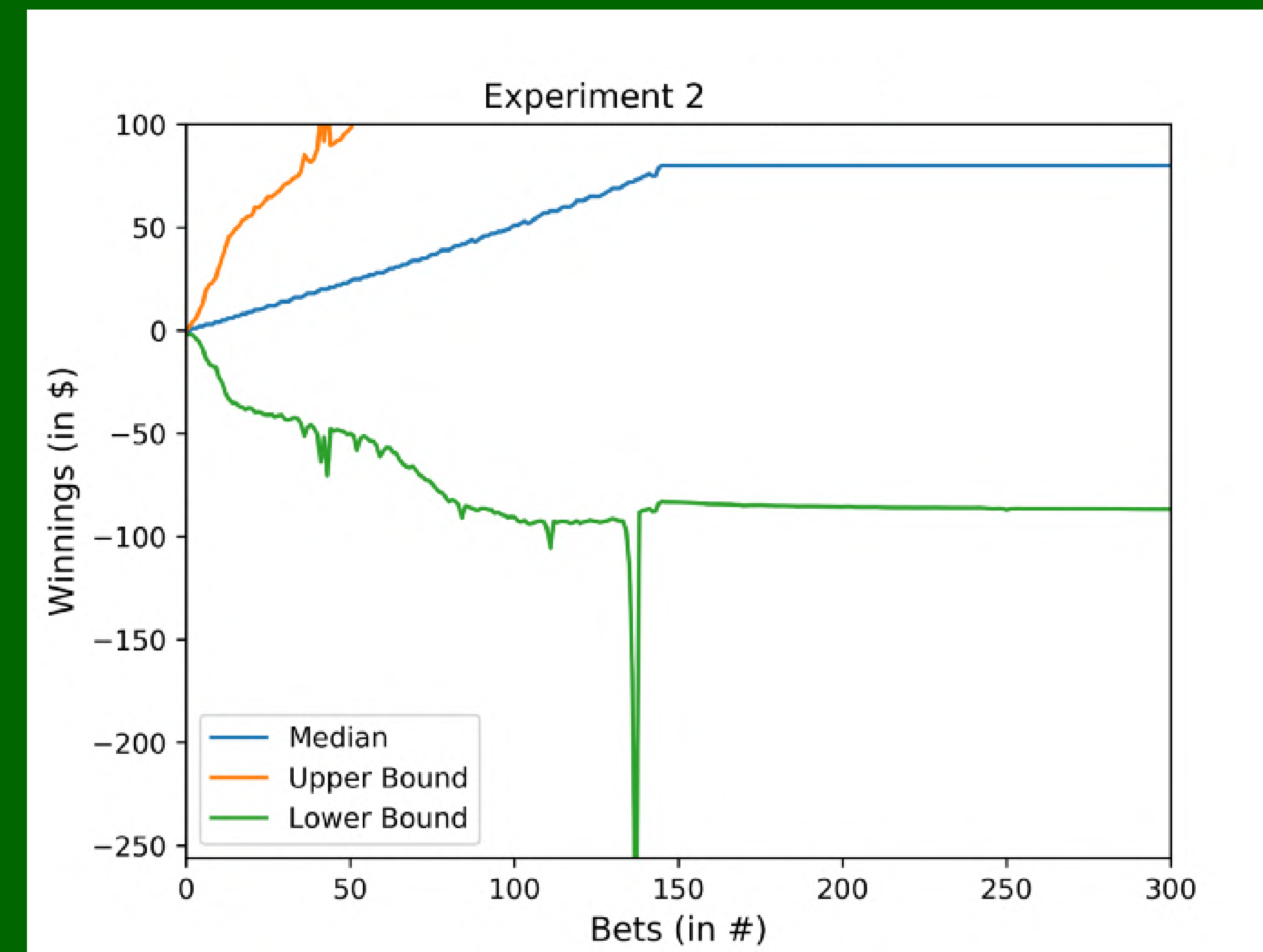
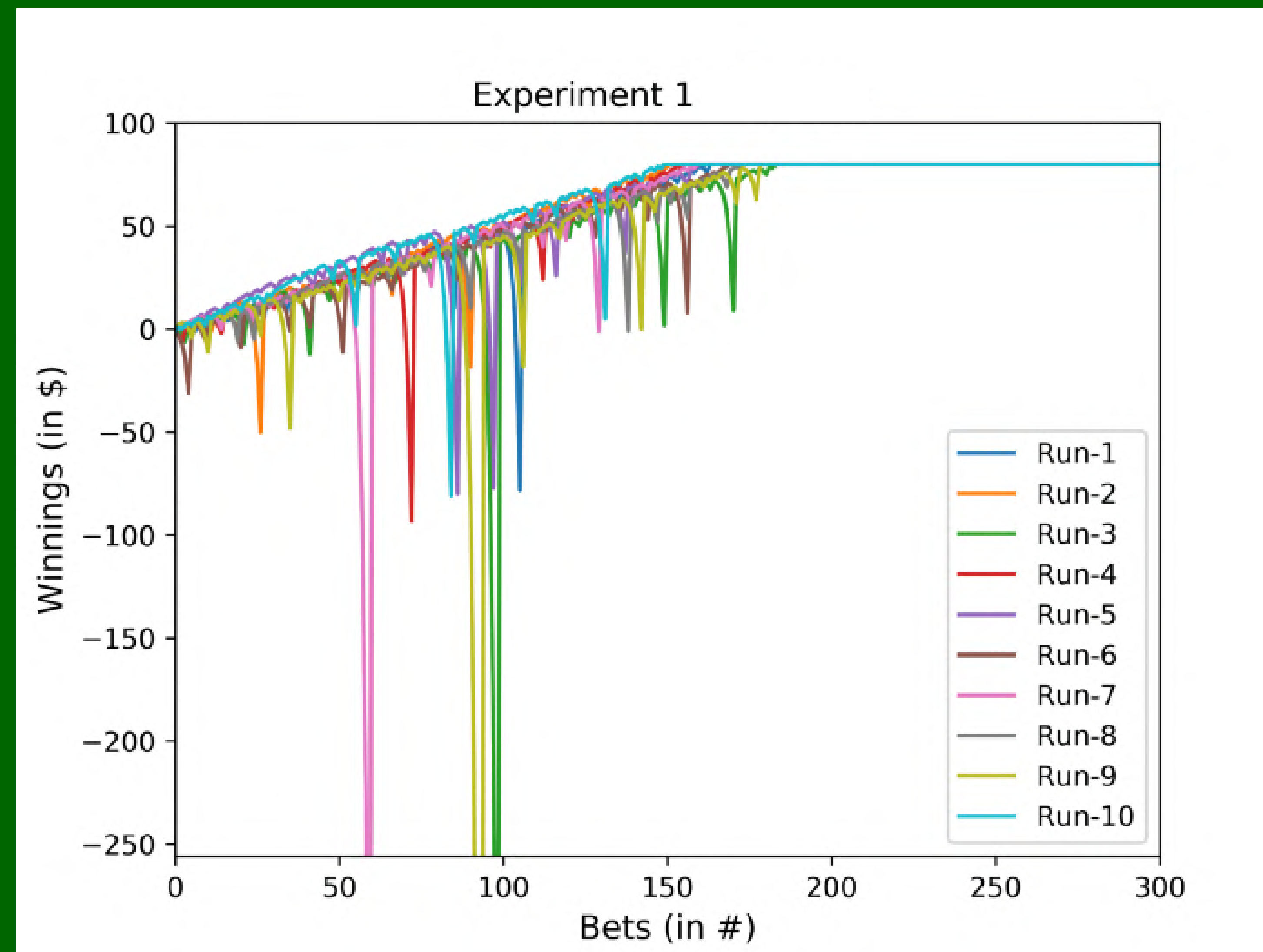
## III] Results

-The double-down strategy: •You bet 1\$ on black, if you win start again  
•If you lose you bet the double of what you have bet last round.

Keep doing this until you finally win, then start again with a bet of 1\$

$-2^{n+1} - \sum_{i=0}^n (2^i) = 1$  So you'll finally win 1\$ at the end of each runs

The gain after n steps      All of your bets after n steps



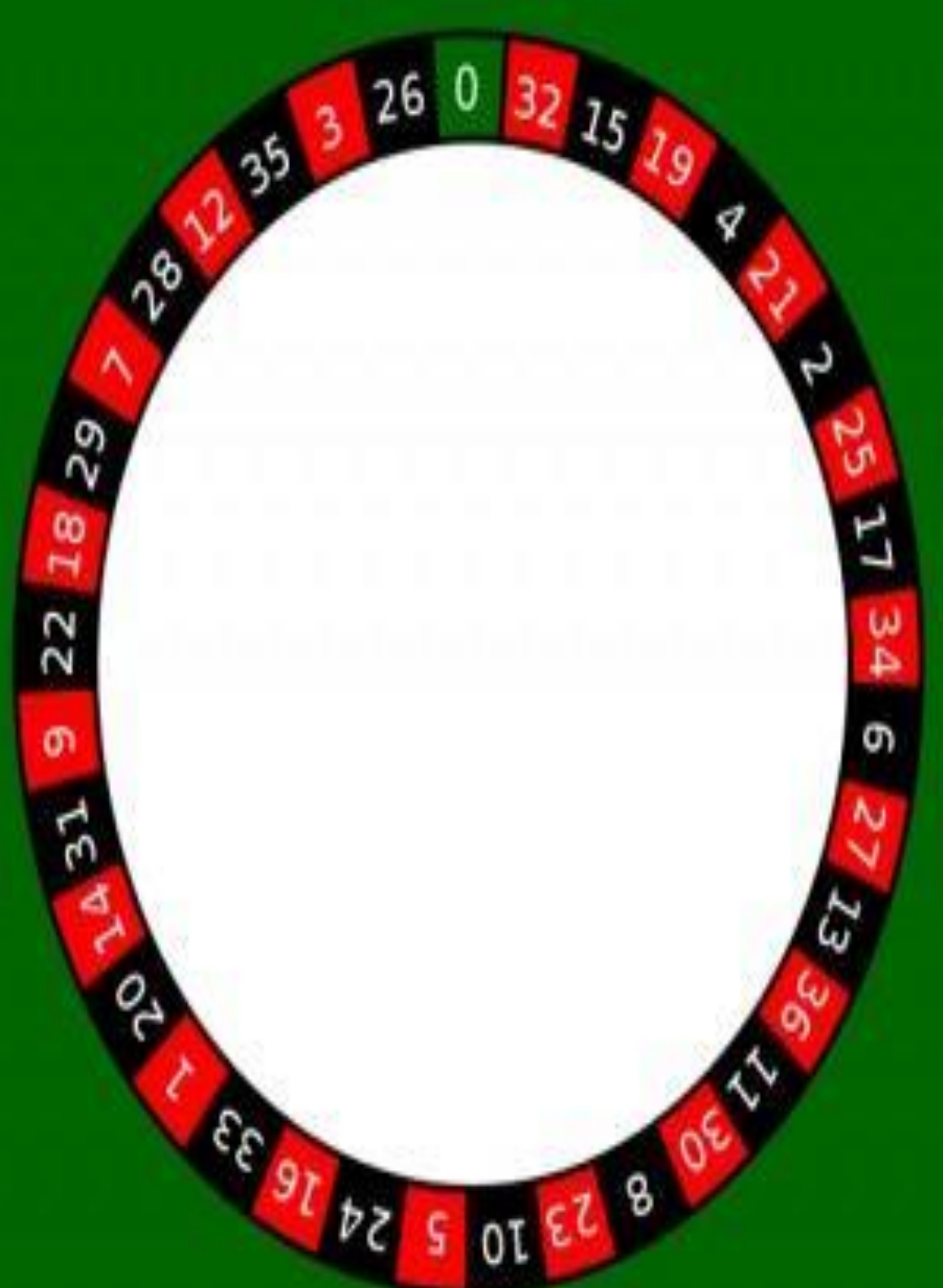
## IV] Can you be rich?

A 100% winning strategy is theoretically possible, but casinos fix a maximum bet limit that counters this.

Moreover, your wins are small whereas a single loss could ruin you

## V] An other strategy

The 3/2 strategy is a more viable one. You bet on several outcomes, you have a huge percentage of winning but the gain is small (a perfect method doesn't exist, otherwise casinos would no longer exist!)



0	3	6	9	12	15	18	21	24	27	30	33	36	2-1
1	2	5	8	11	14	17	20	23	26	29	32	35	2-1
4	7	10	13	16	19	22	25	28	31	34	37	38	2-1
11	14	17	20	23	26	29	32	35	38	41	44	47	2-1
18	21	24	27	30	33	36	39	42	45	48	51	54	2-1
25	28	31	34	37	40	43	46	49	52	55	58	61	2-1
32	35	38	41	44	47	50	53	56	59	62	65	68	2-1
39	42	45	48	51	54	57	60	63	66	69	72	75	2-1
46	49	52	55	58	61	64	67	70	73	76	79	82	2-1
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