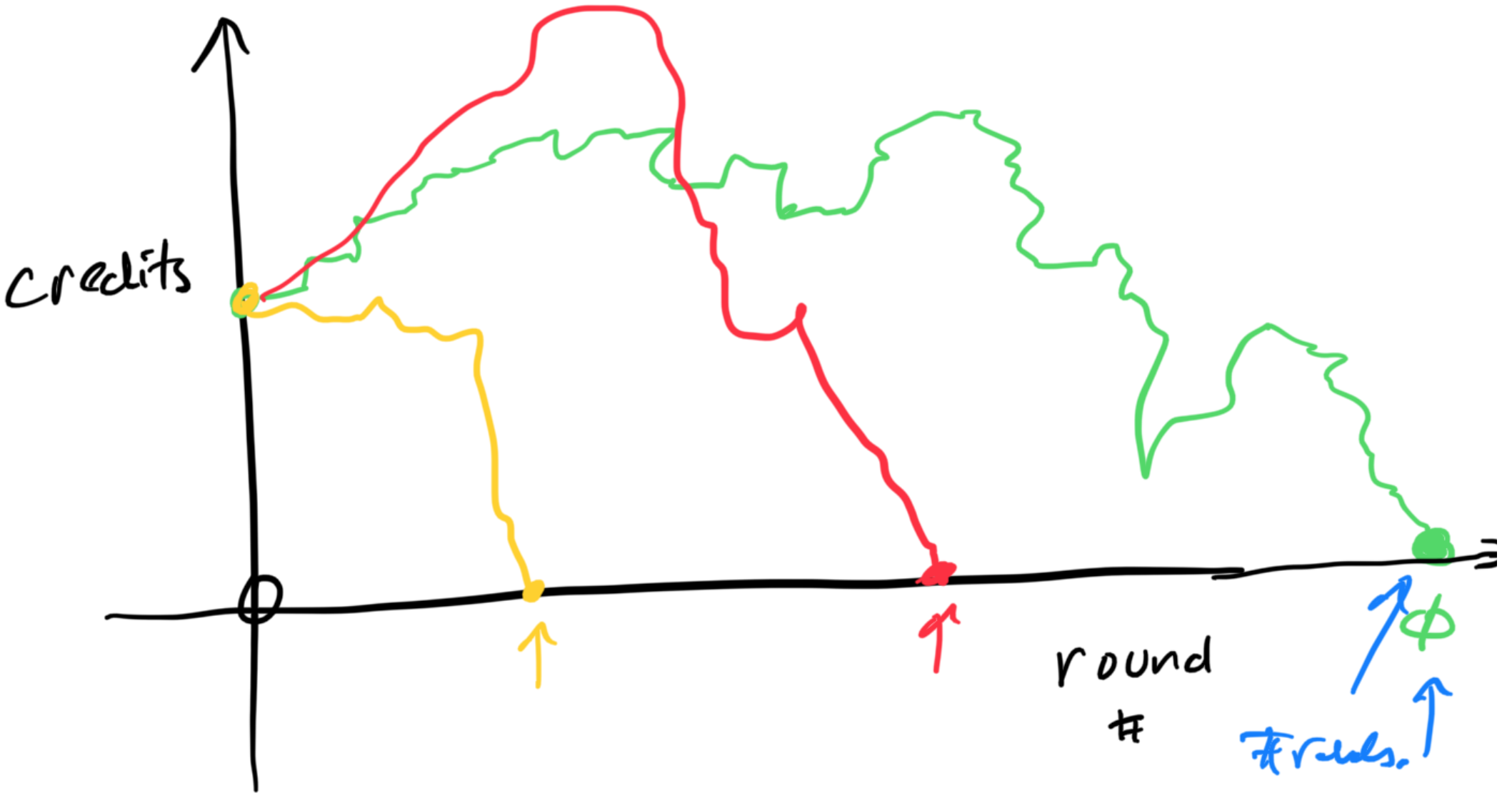
Plotting the Credits Profile

"Data Manipulation"



How can we do this?

Two things:

① store the data to be plotted in some kind of data structure.

② create the plot, using some kind of plotting package.

~~Excel~~

x

#	credits

y

round	
ϕ	initial = 10
1	11
2	12
3	11
4	12
⋮	⋮

result_count

18422 ← list

ϕ ← list

rounds

credit_round [ ]

result_count [ ]

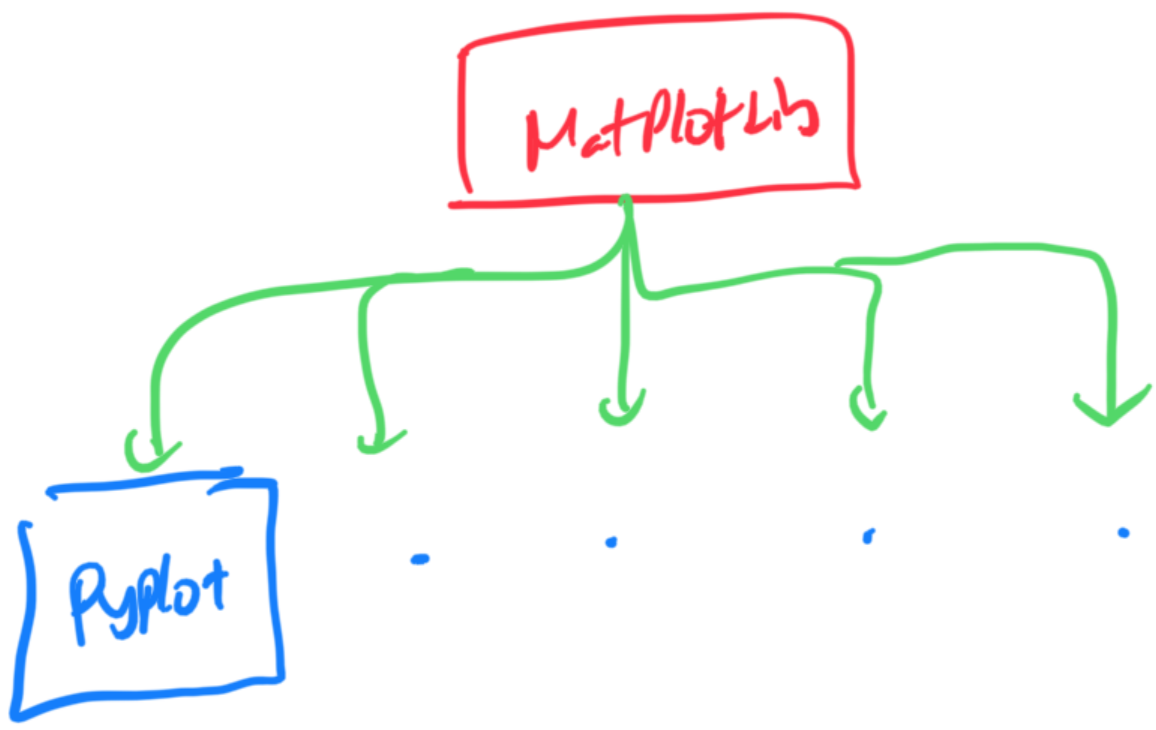
INT

LIST

LIST

MatPlotLib

→ many, many parts!



import matplotlib.pyplot as plt

matplotlib.pyplot.______

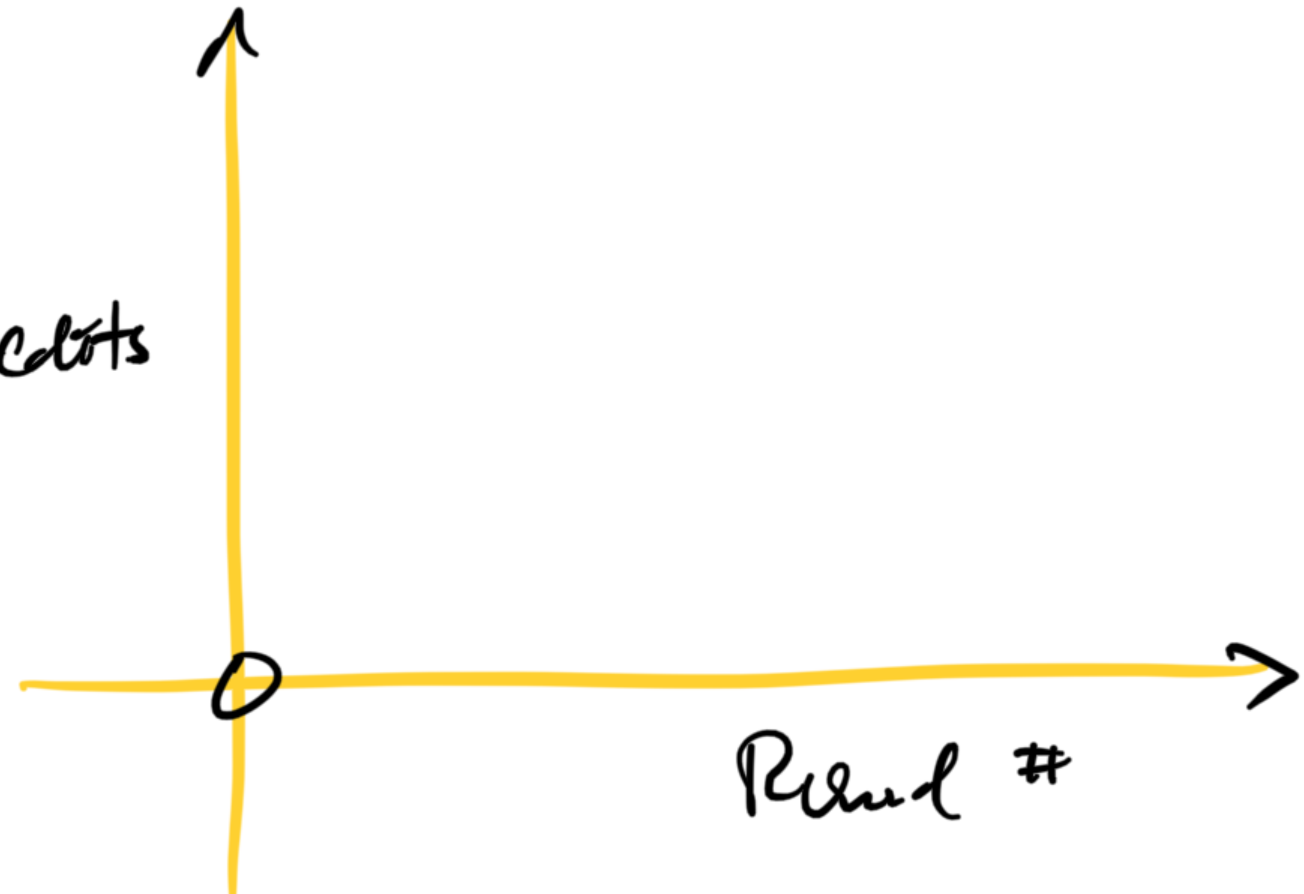
too long !!

Brash's Rules of Plotting.

① Title

Descriptive st   y vs. x

Problem.   y   Credits vs. Round # "



② Label the x-axis with units !! if appropriate

③ Label the y-axis ↺

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① Multiple simulations at once

(2) Output → # rounds → ϕ

Design

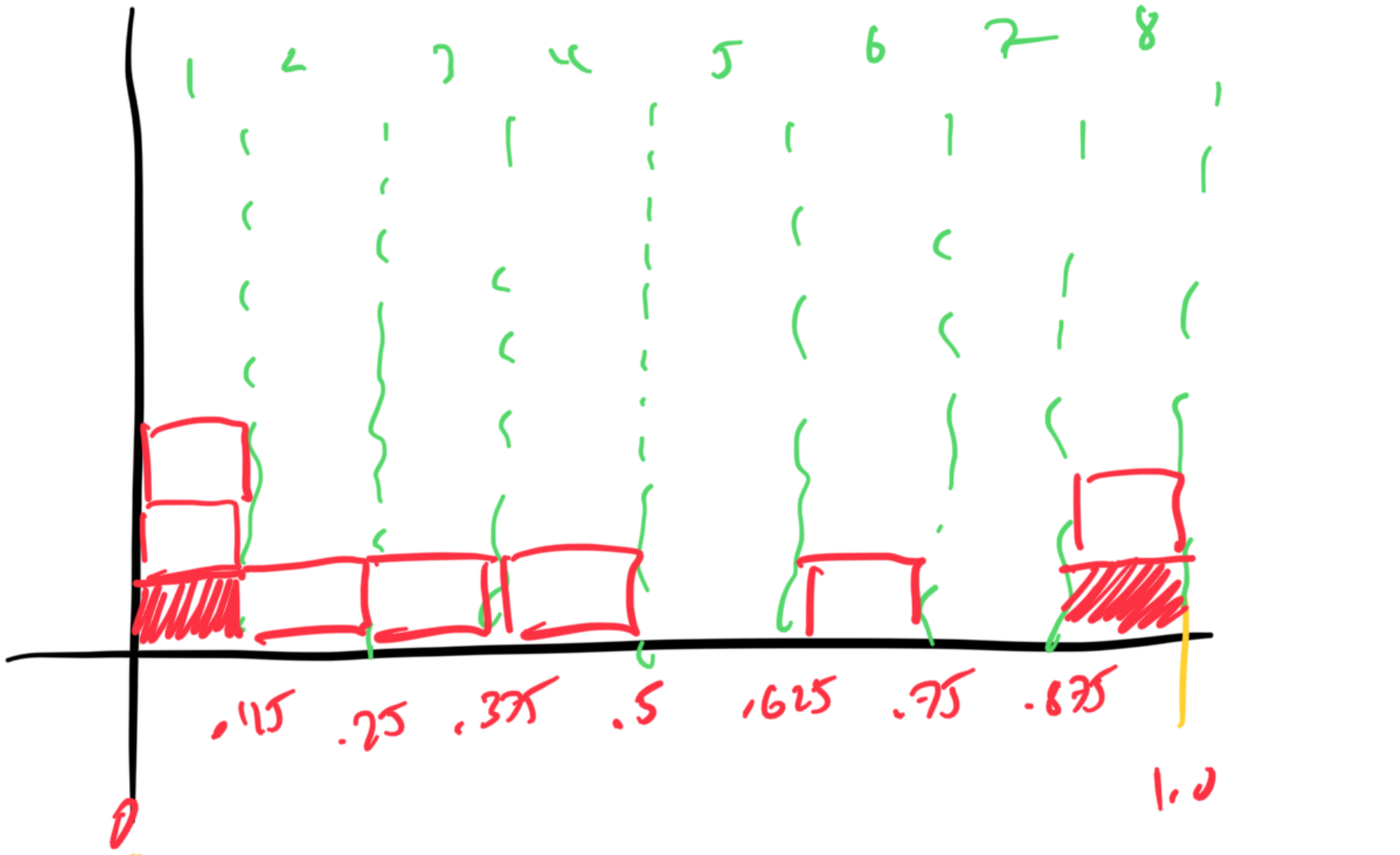
num_sims = 100

for i in range(num_sims):

    Old program

Histograms.

# of Bins



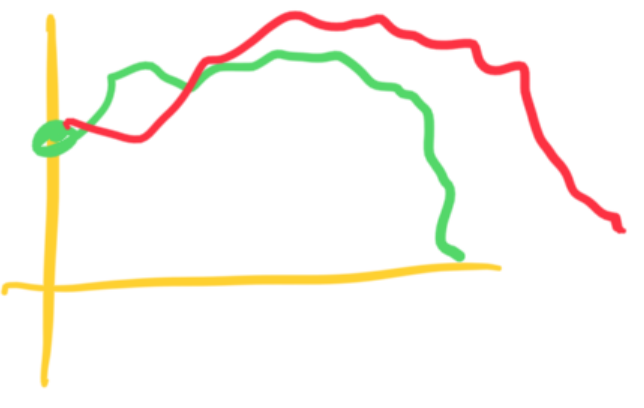
Process data =>

0.10 → 1

0.9 → 8

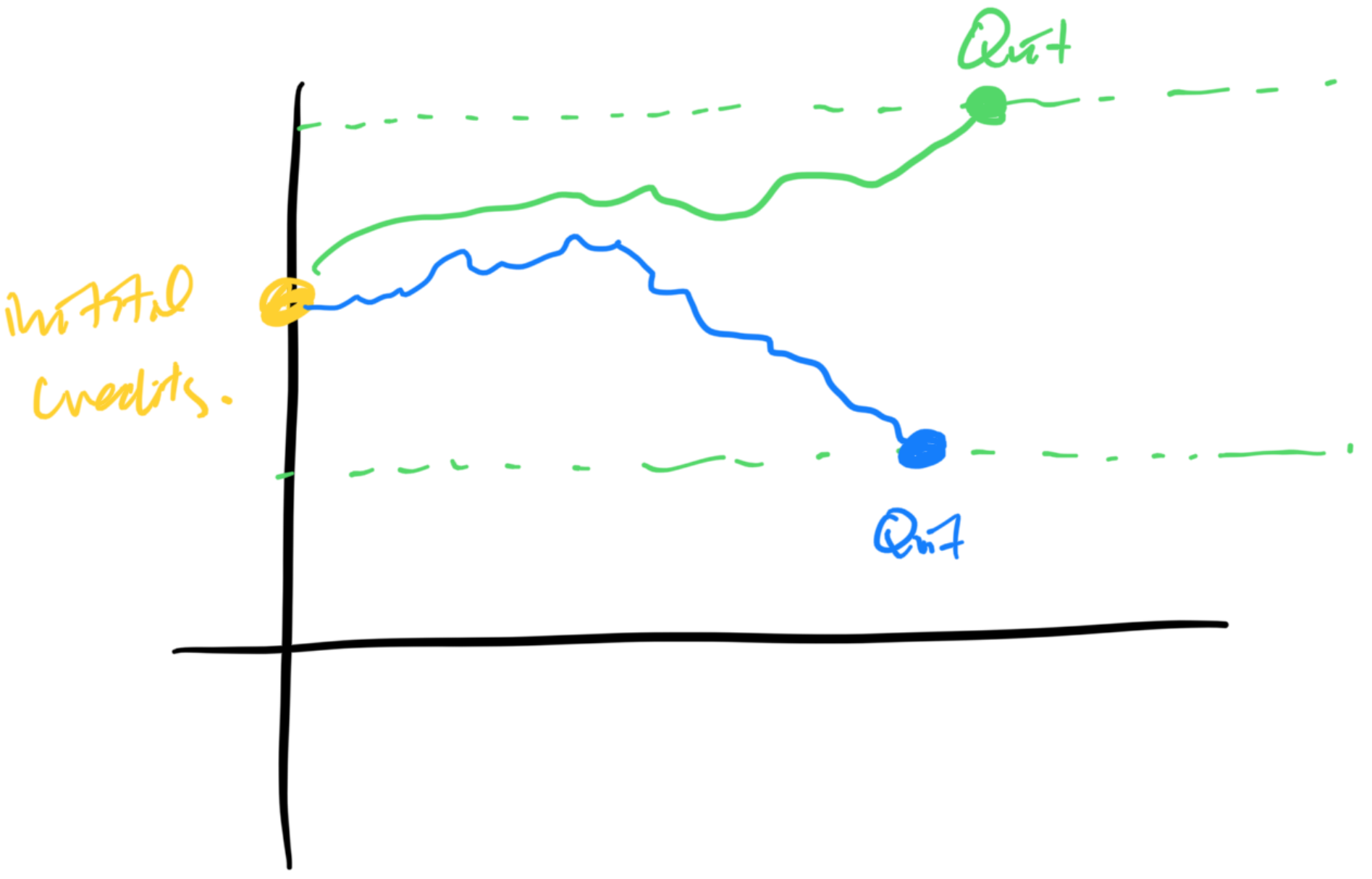
result-number [0] [1] ... [999]

credit-result [$] [1] ... [999]



Philosophy :

→ play until Credits = $



up 10% } Quit

dwn 10%

Up 50%
down 50% } Quit.

⋮
