MATH 308 PROJECT

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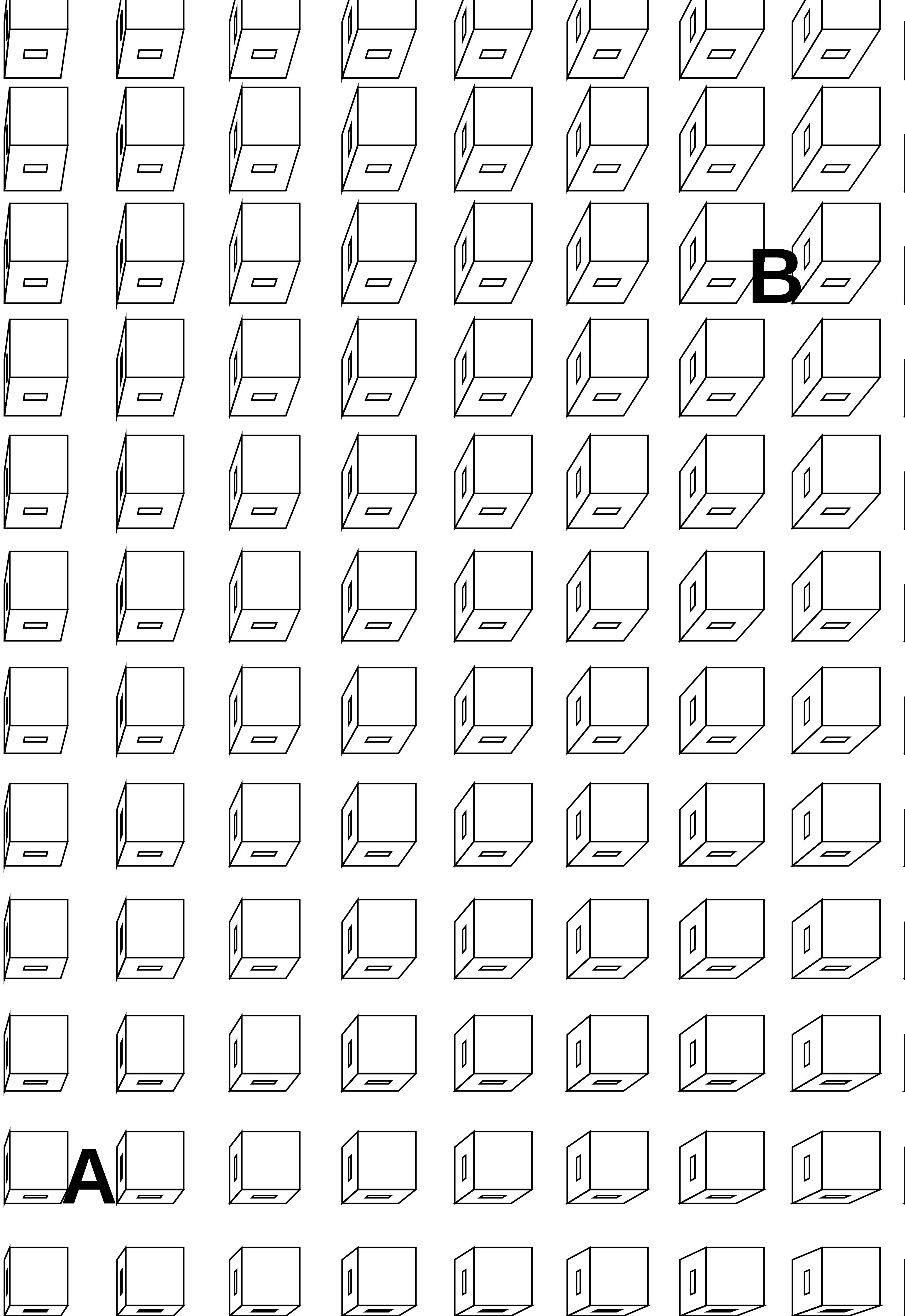
14531032

Topic:

In a city like Vancouver, where all the streets are perpendicular to each other, there are no short cuts from place A to B.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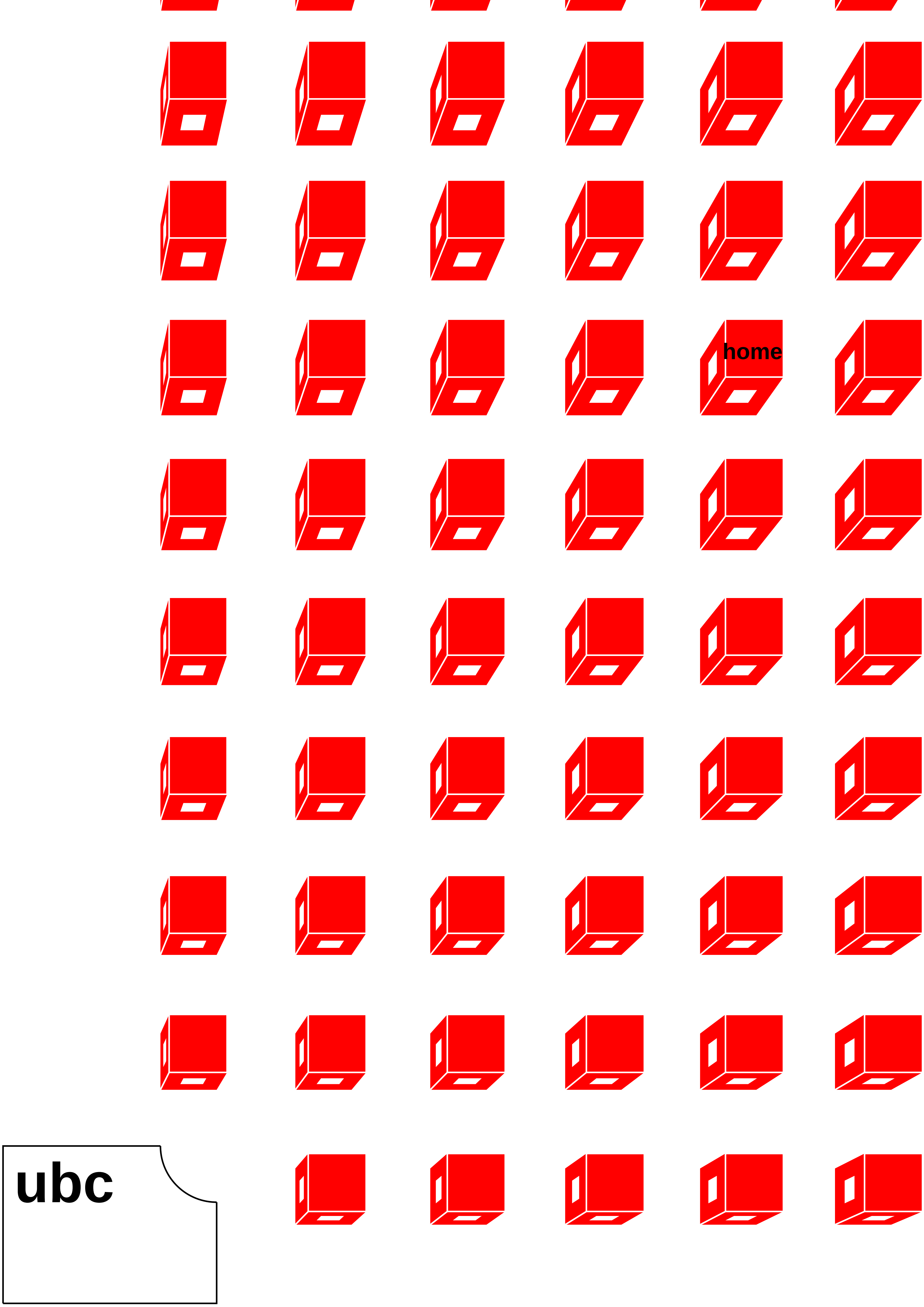
A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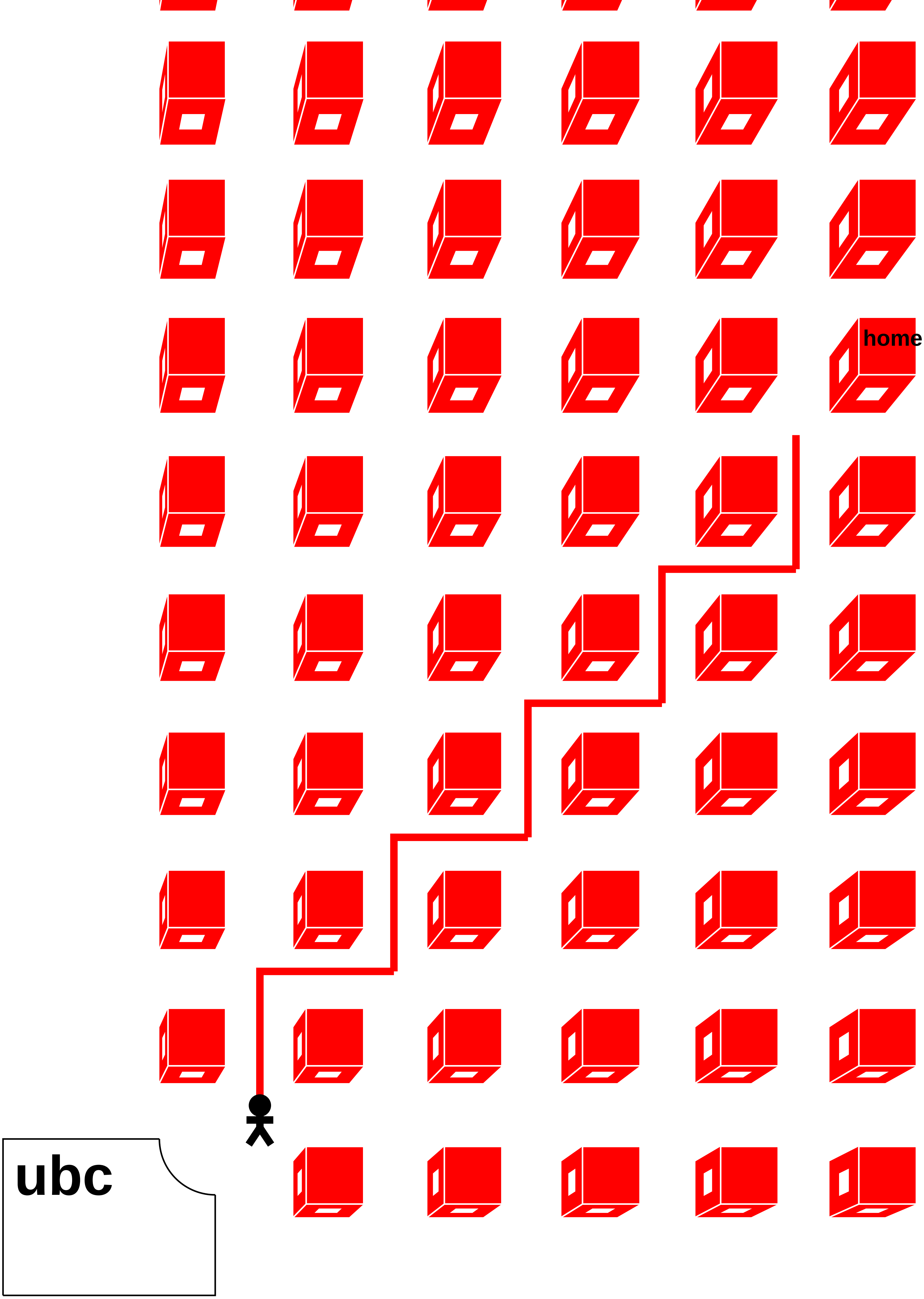
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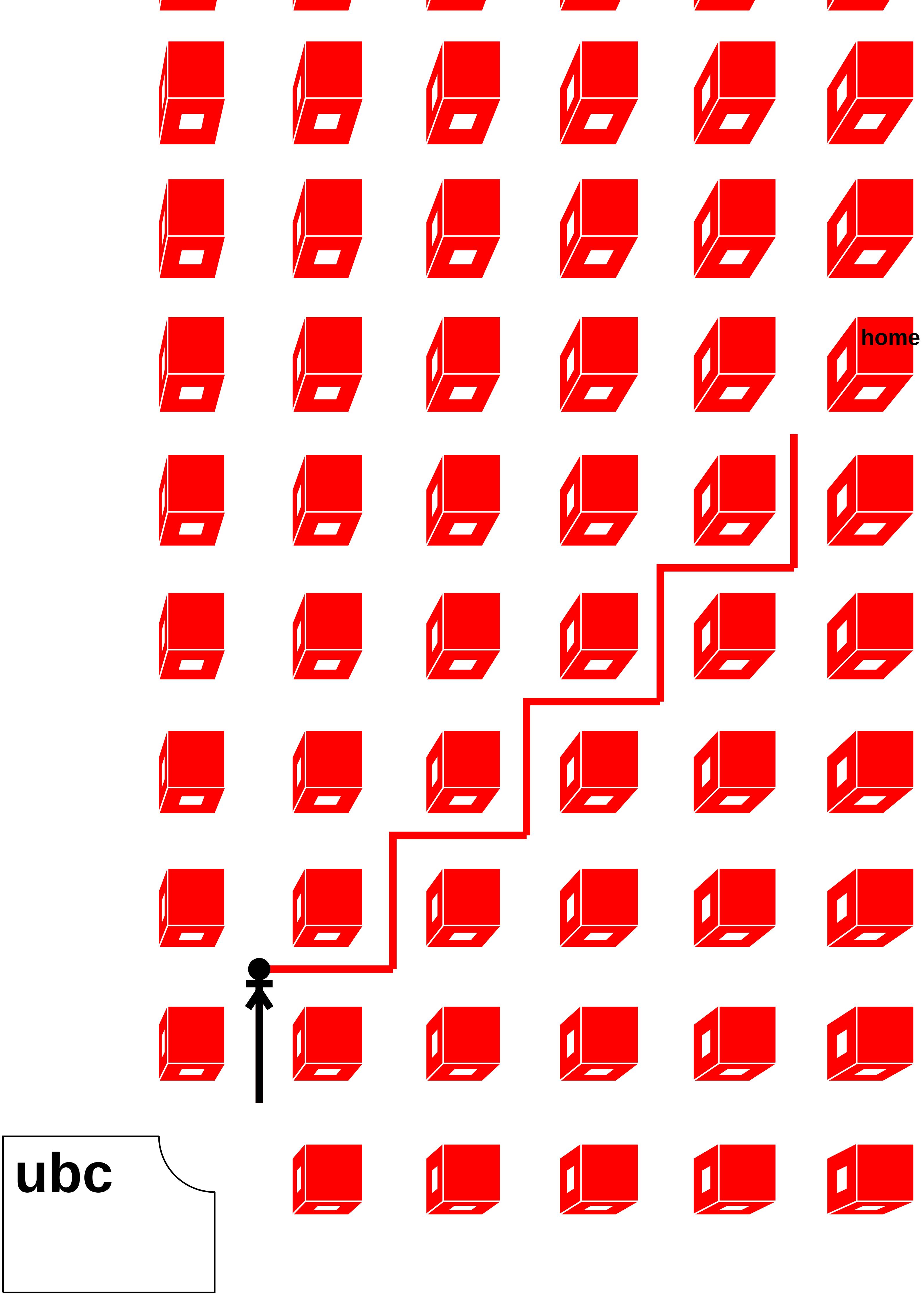
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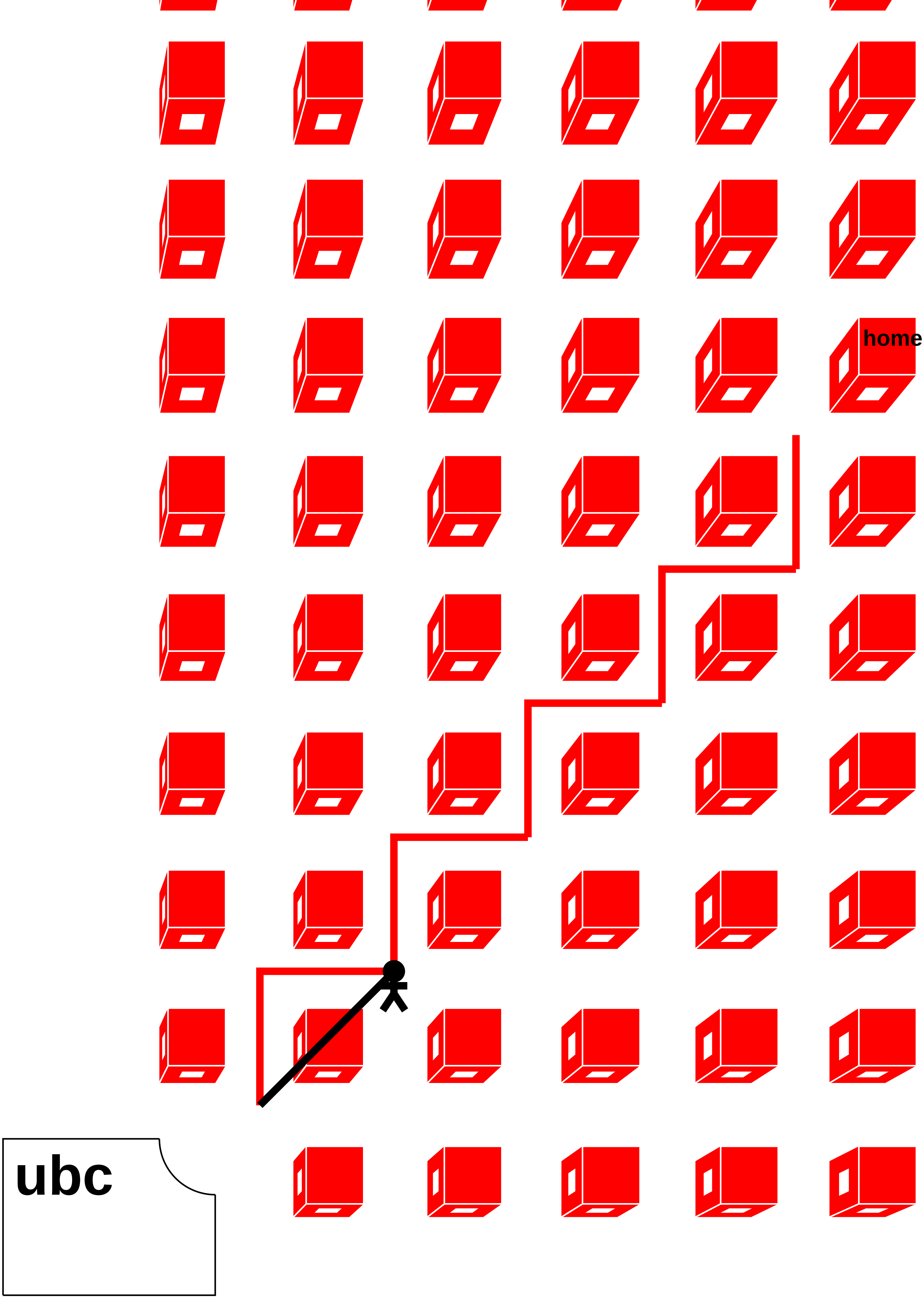
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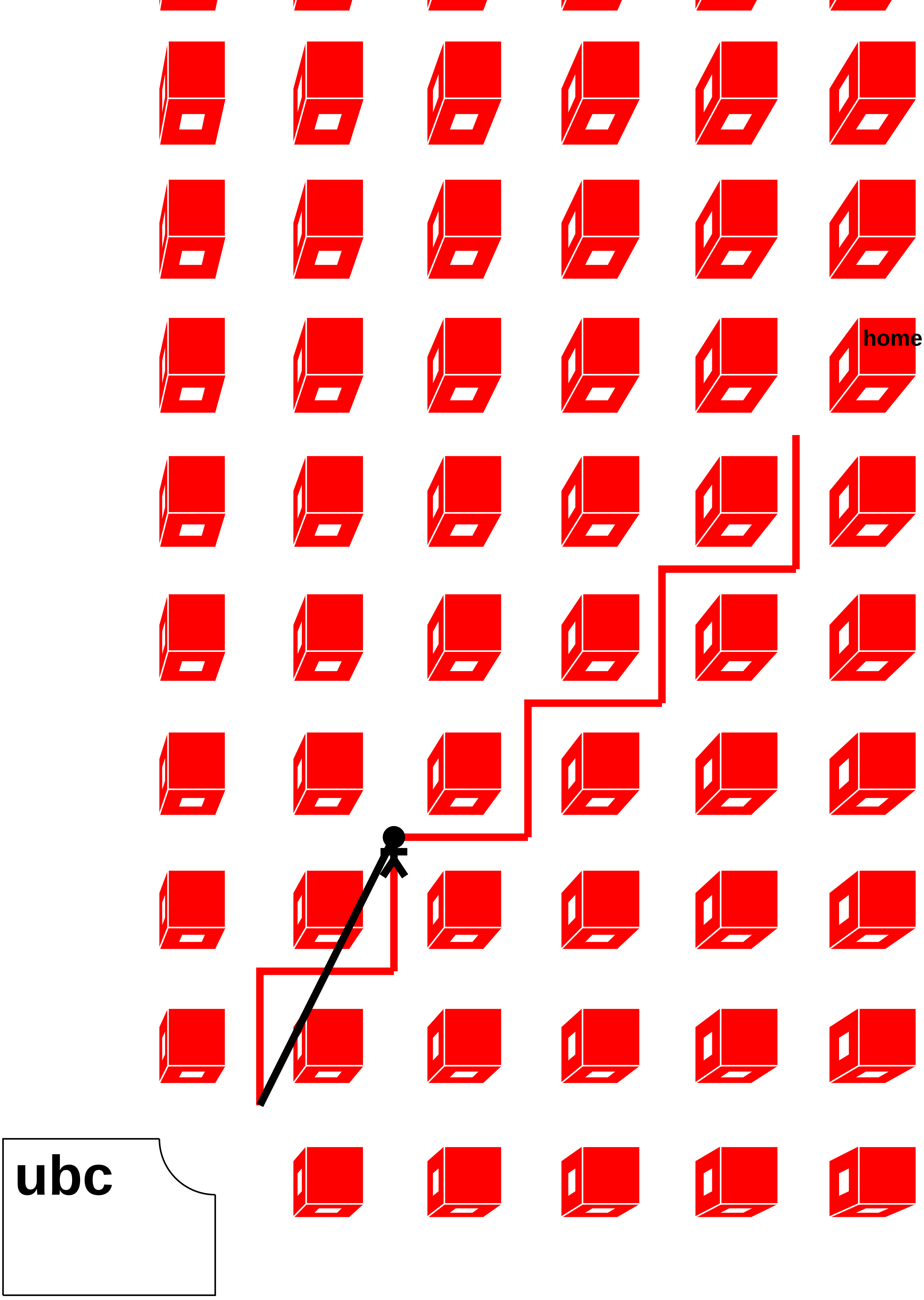
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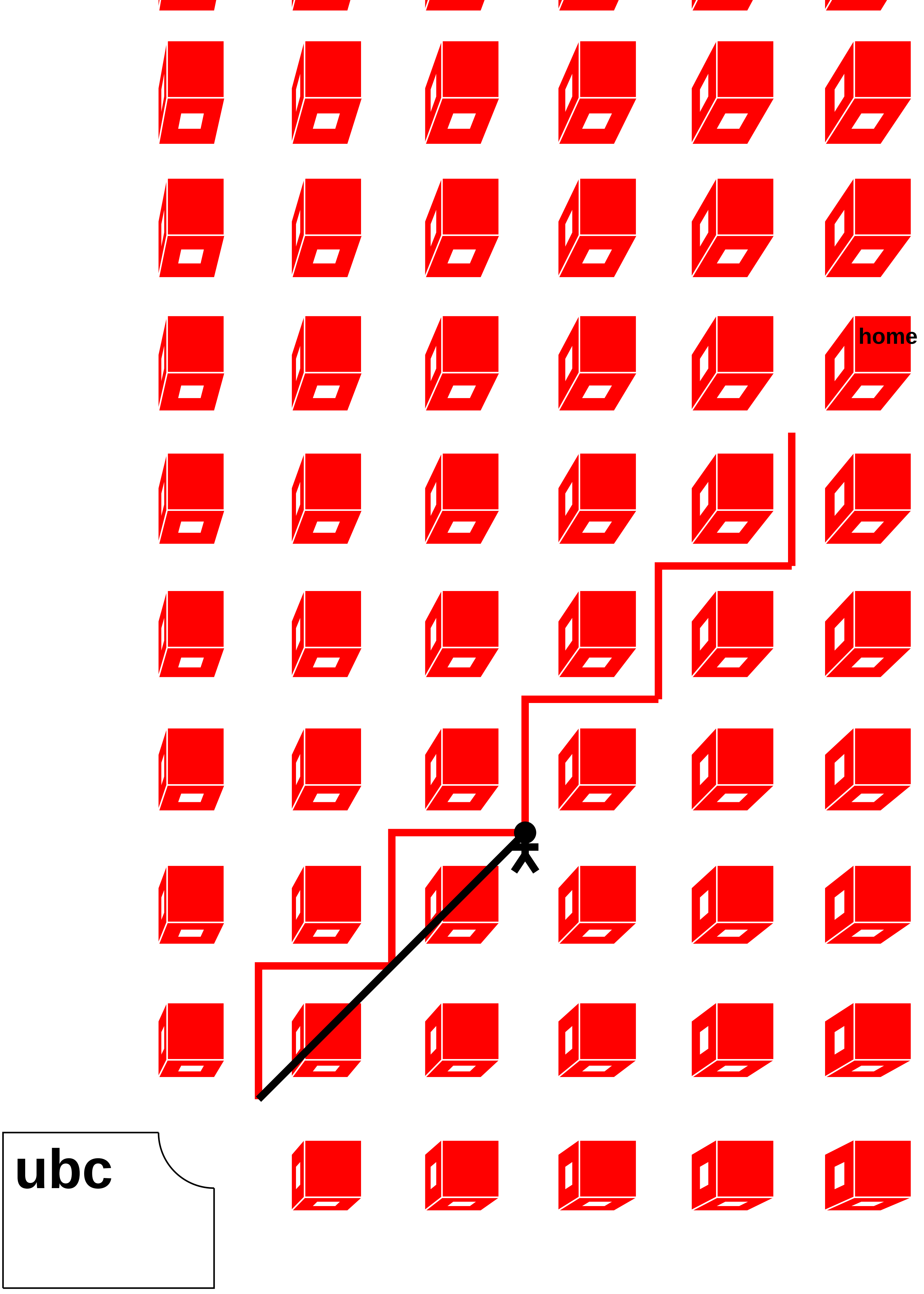
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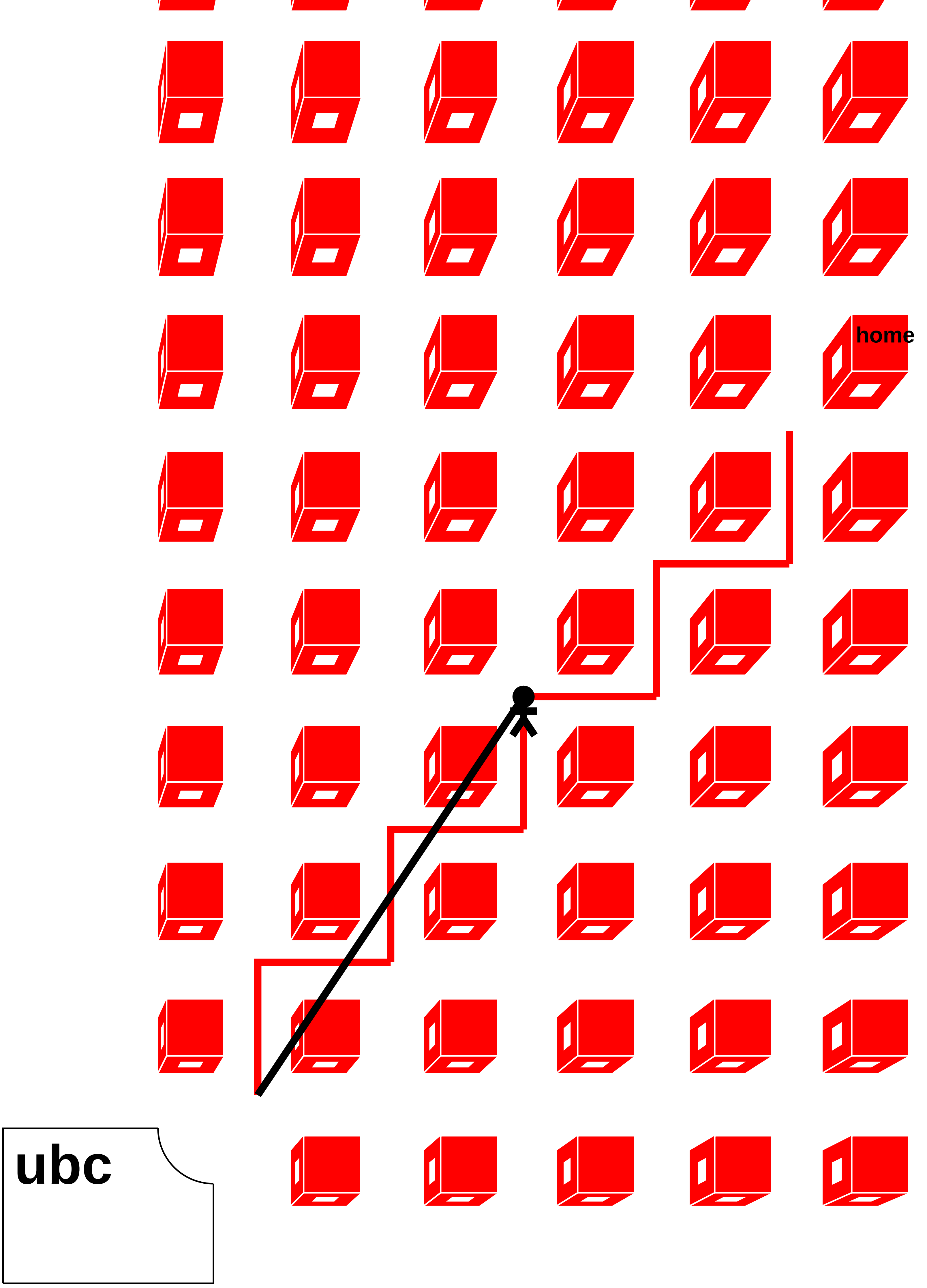
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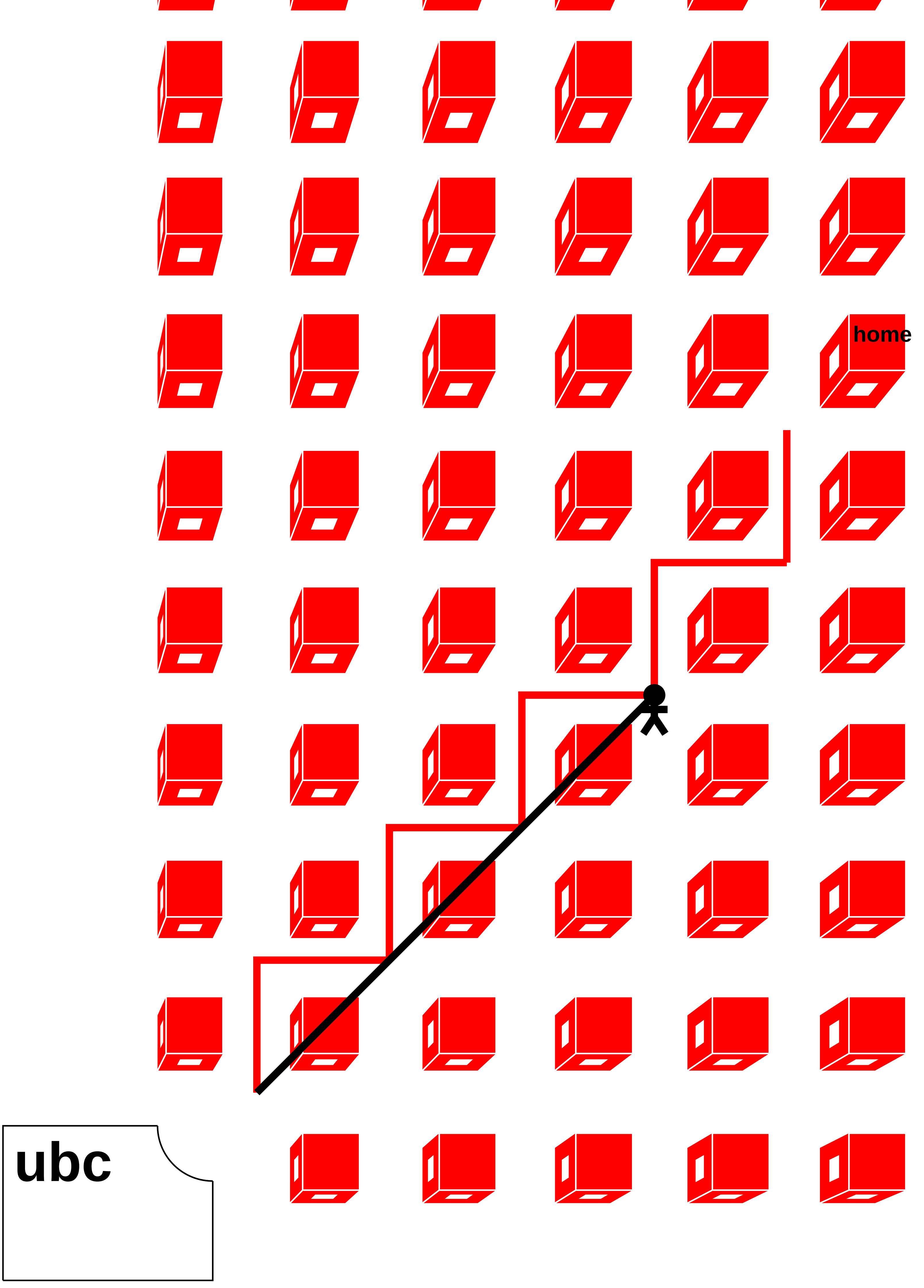
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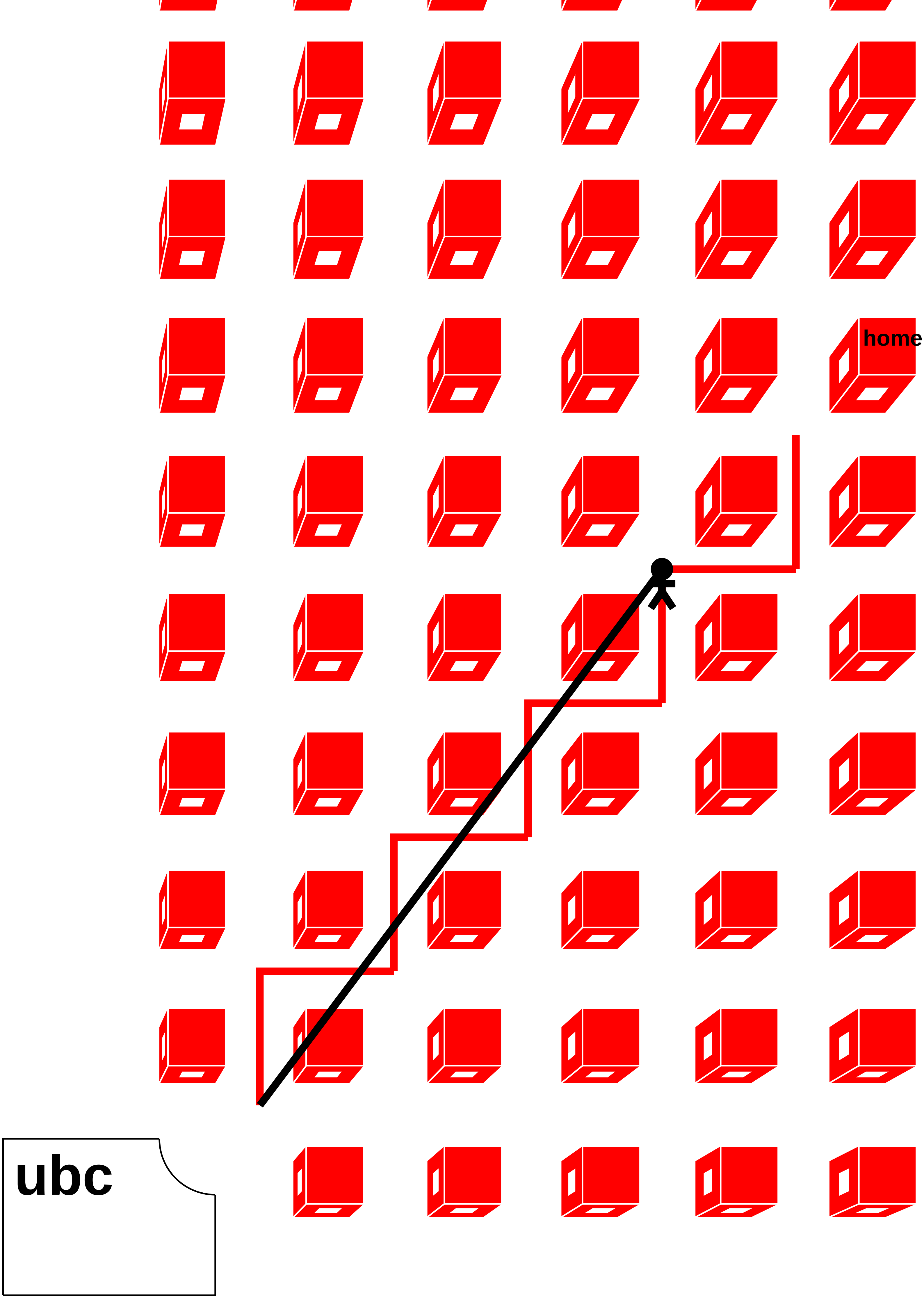
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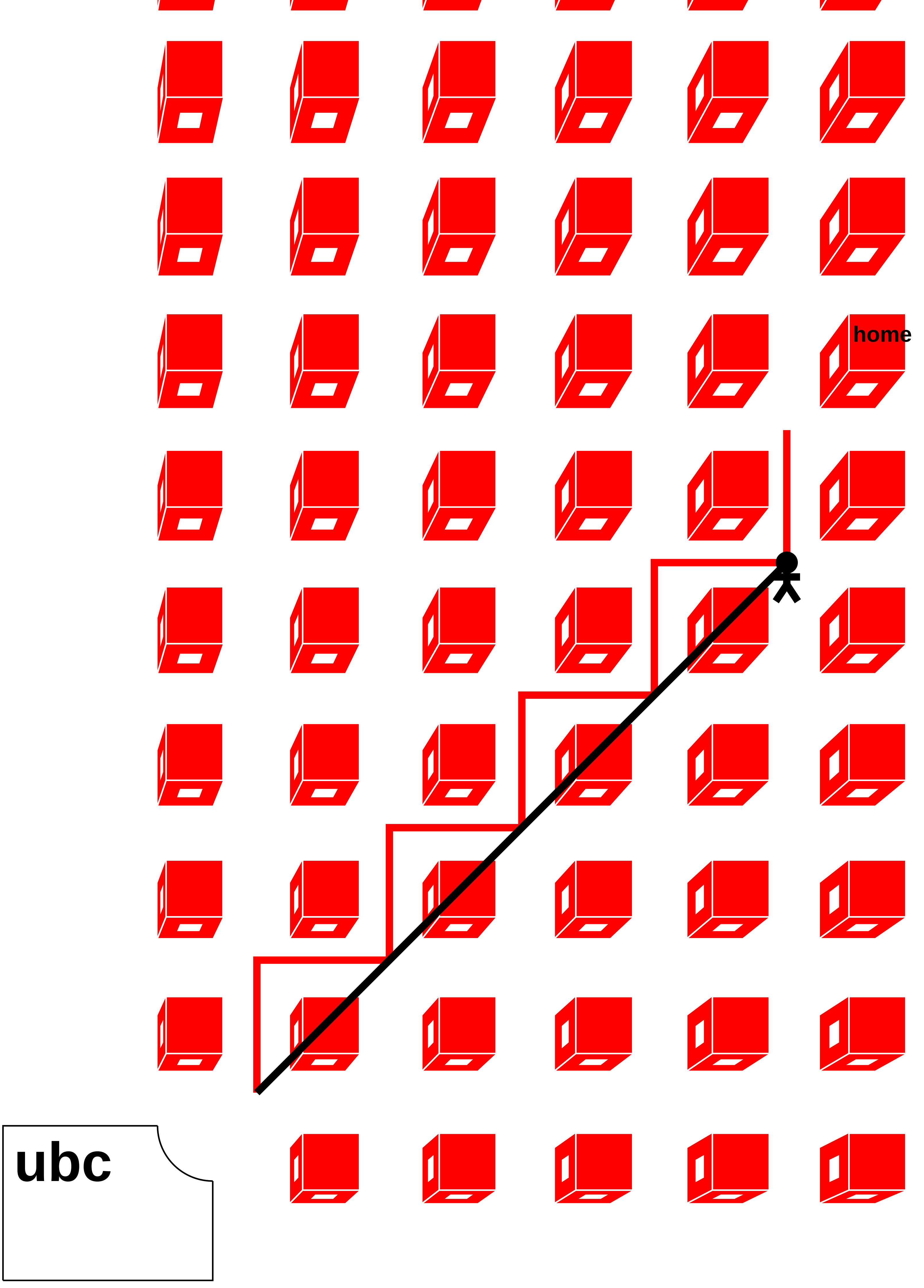
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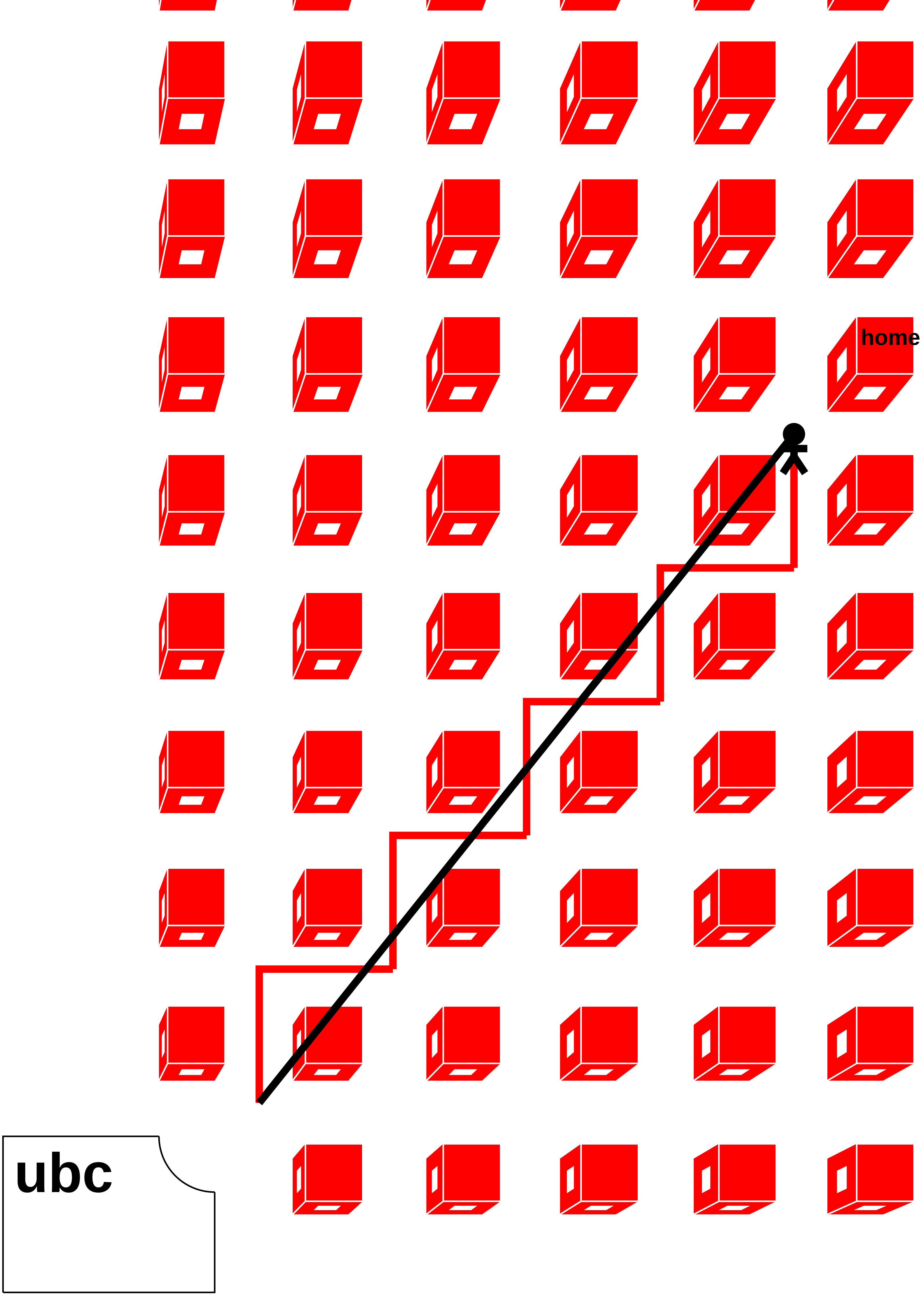
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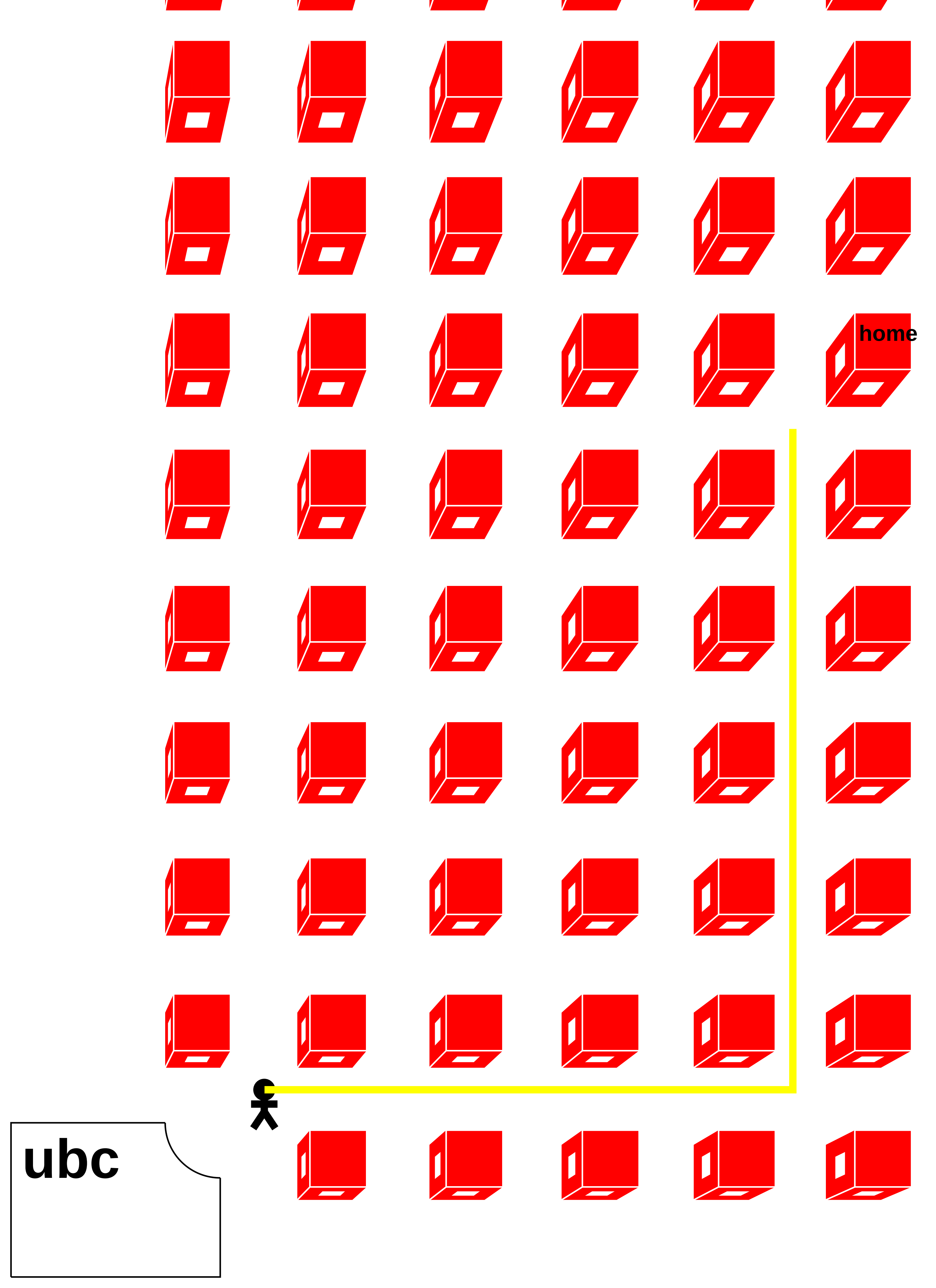
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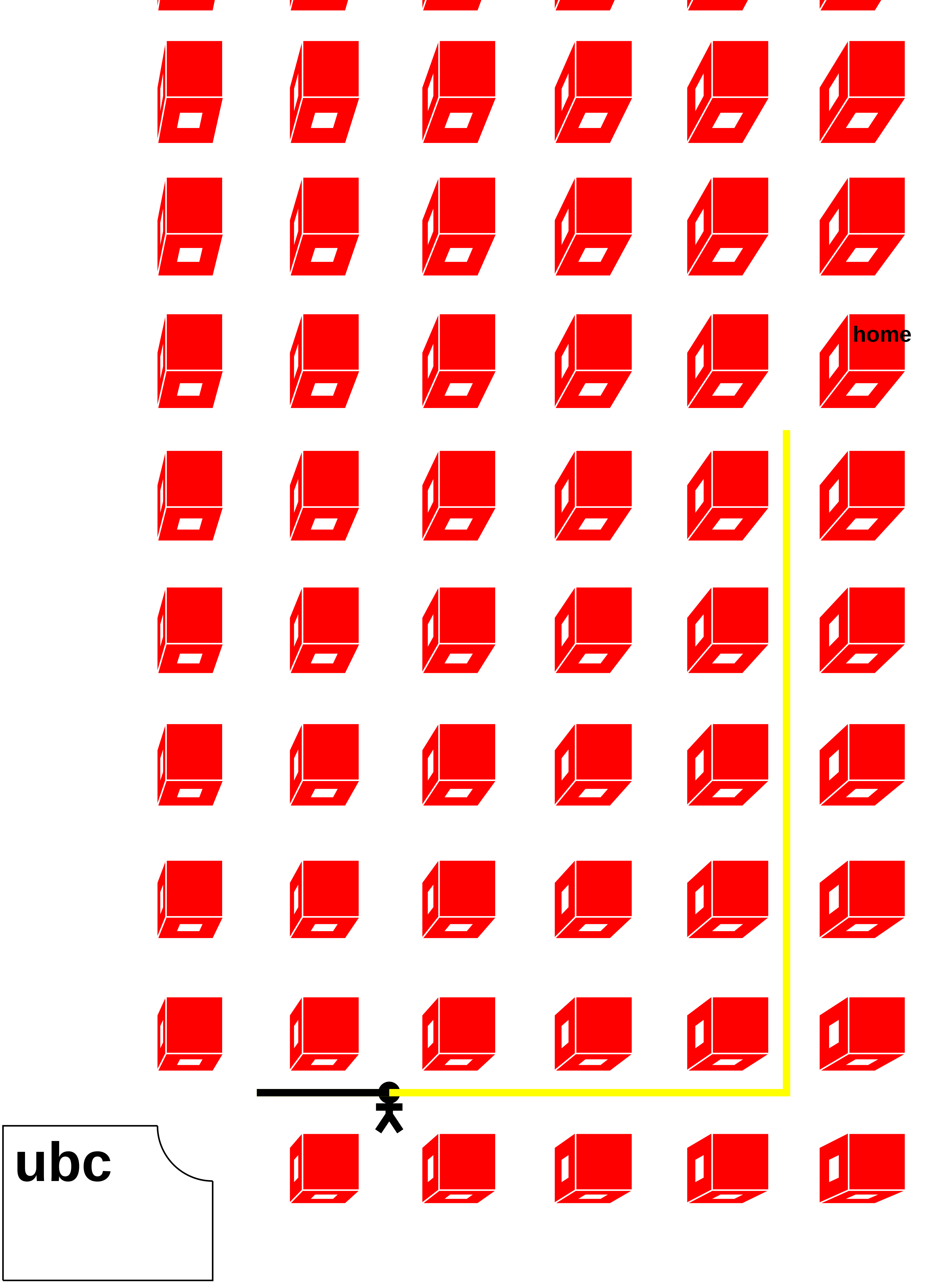
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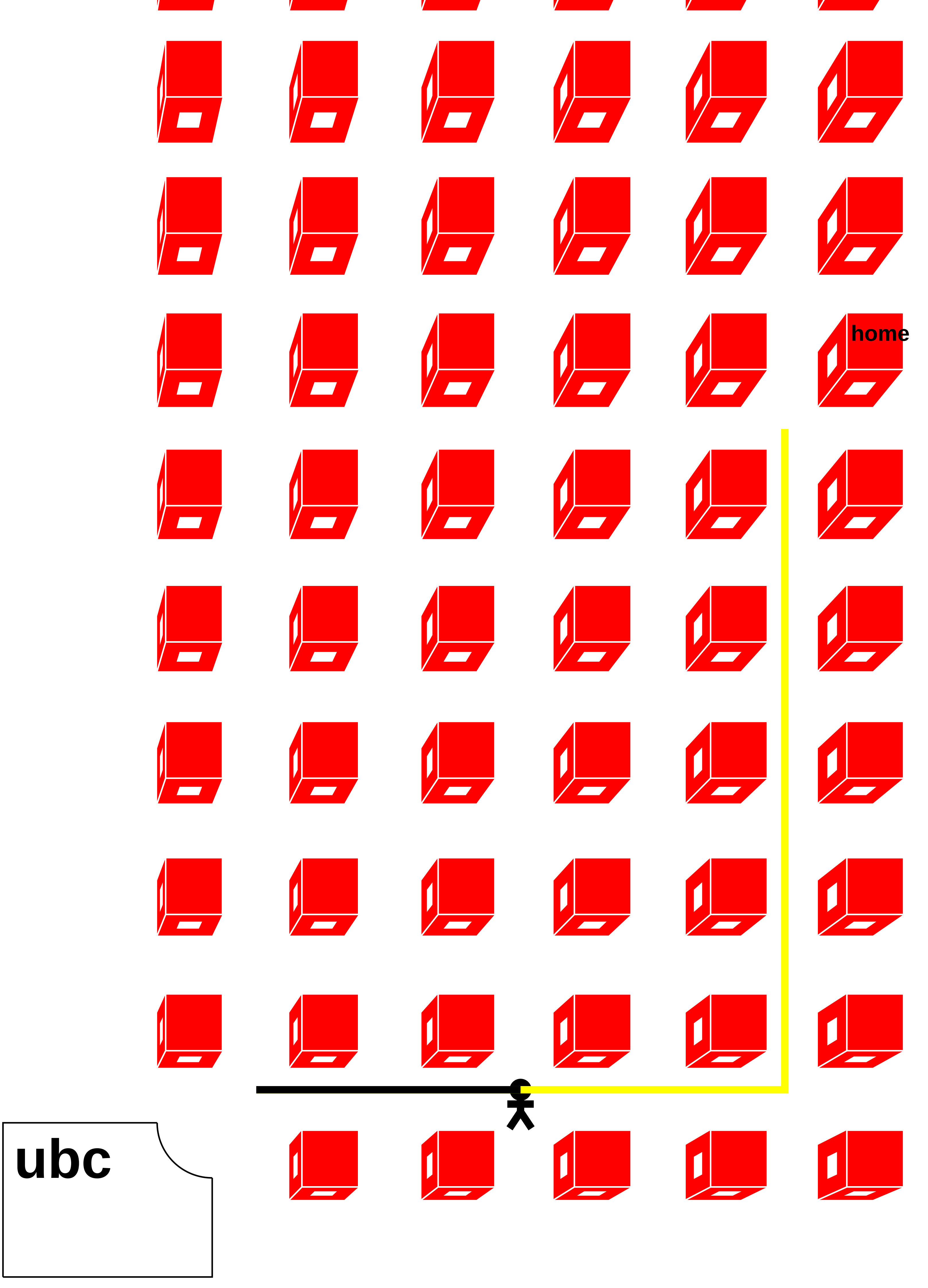
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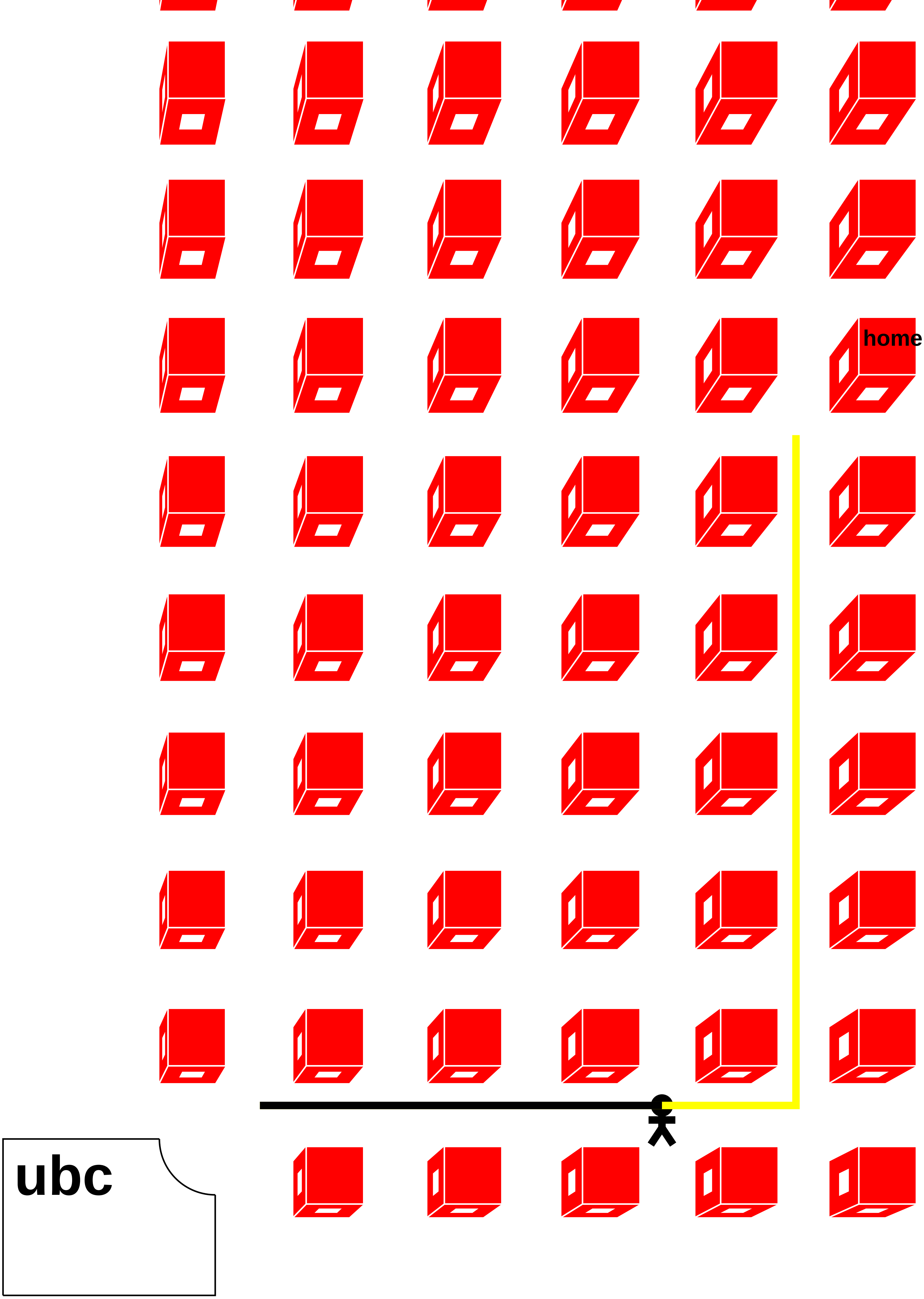
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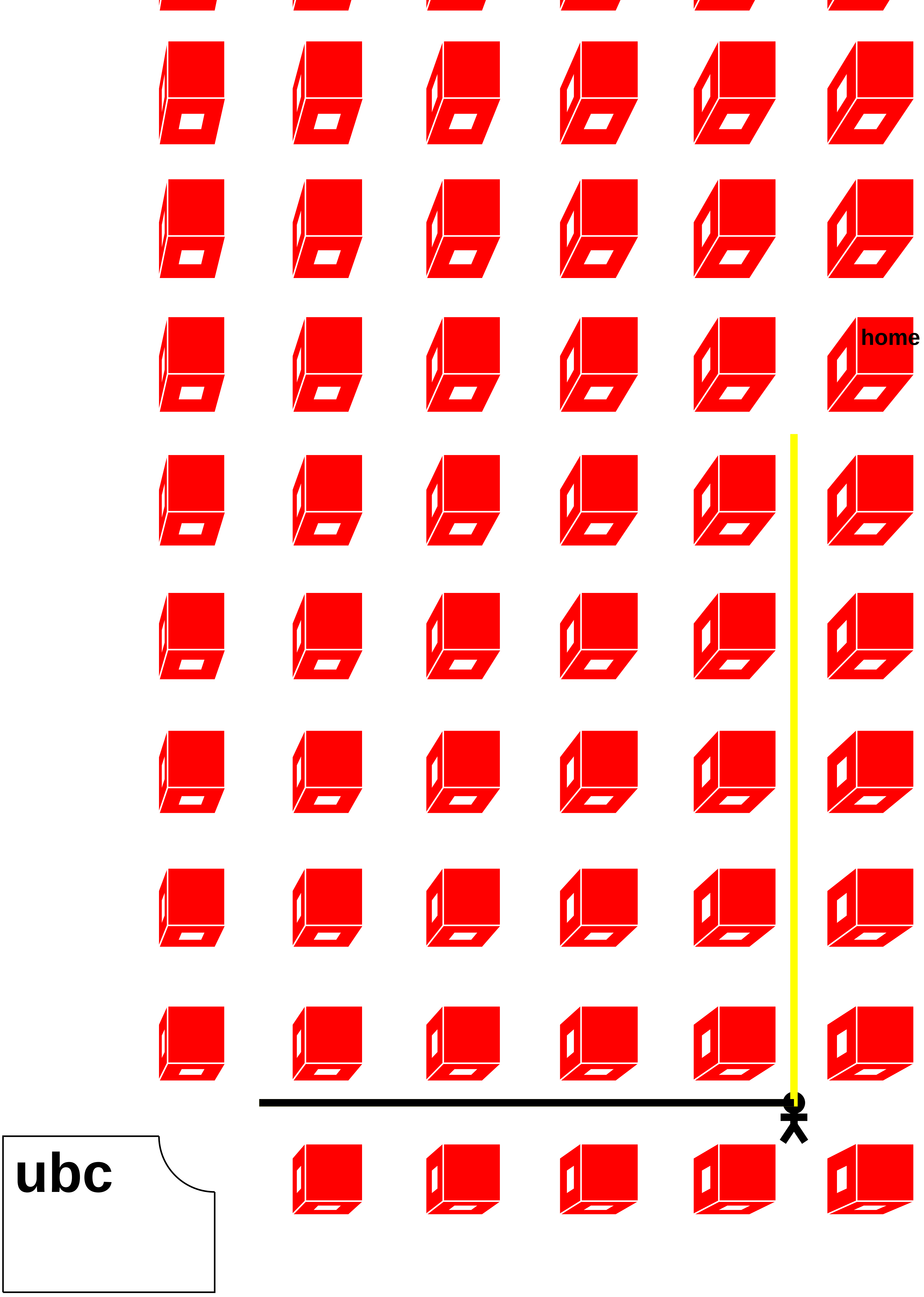
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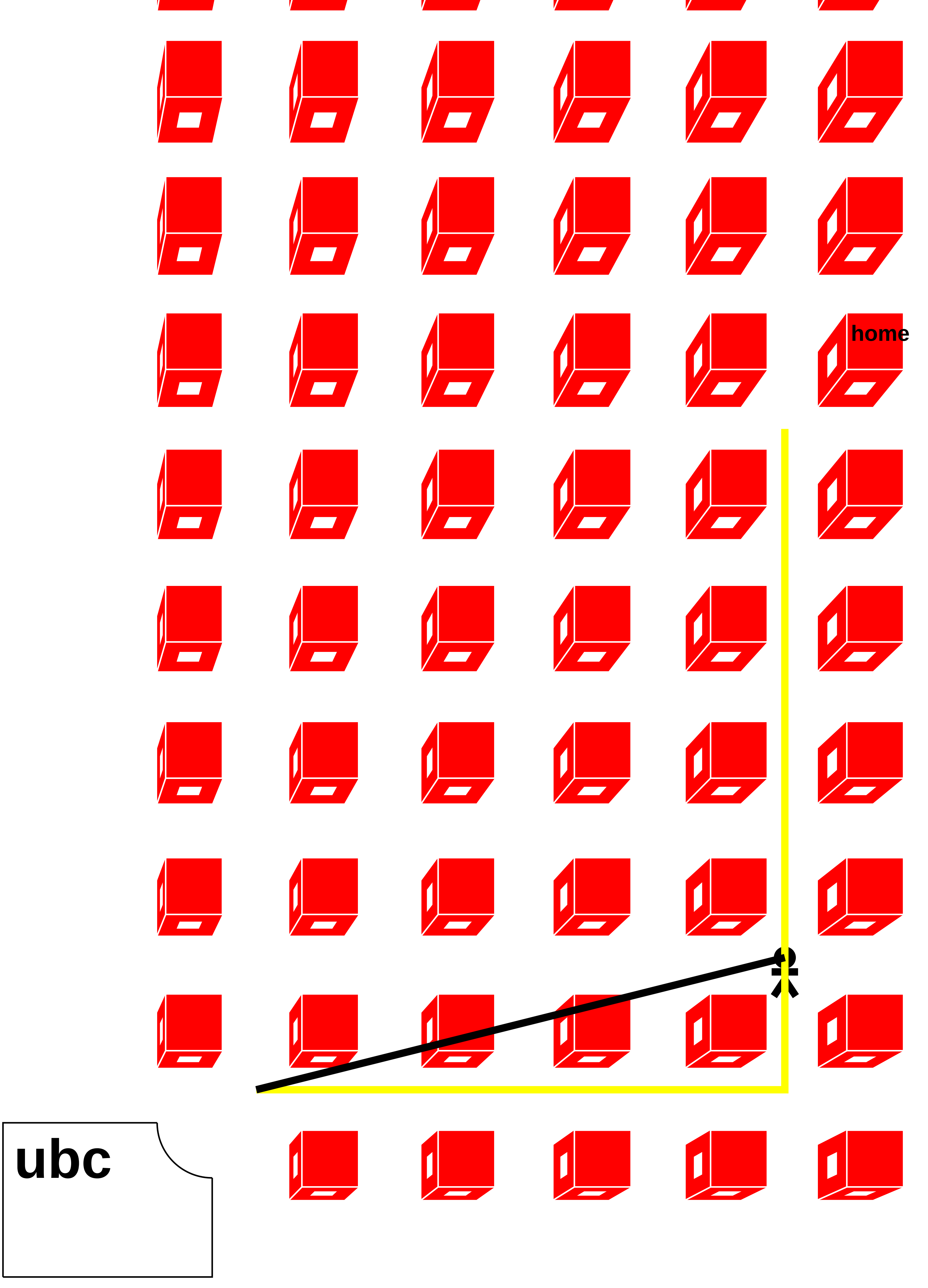
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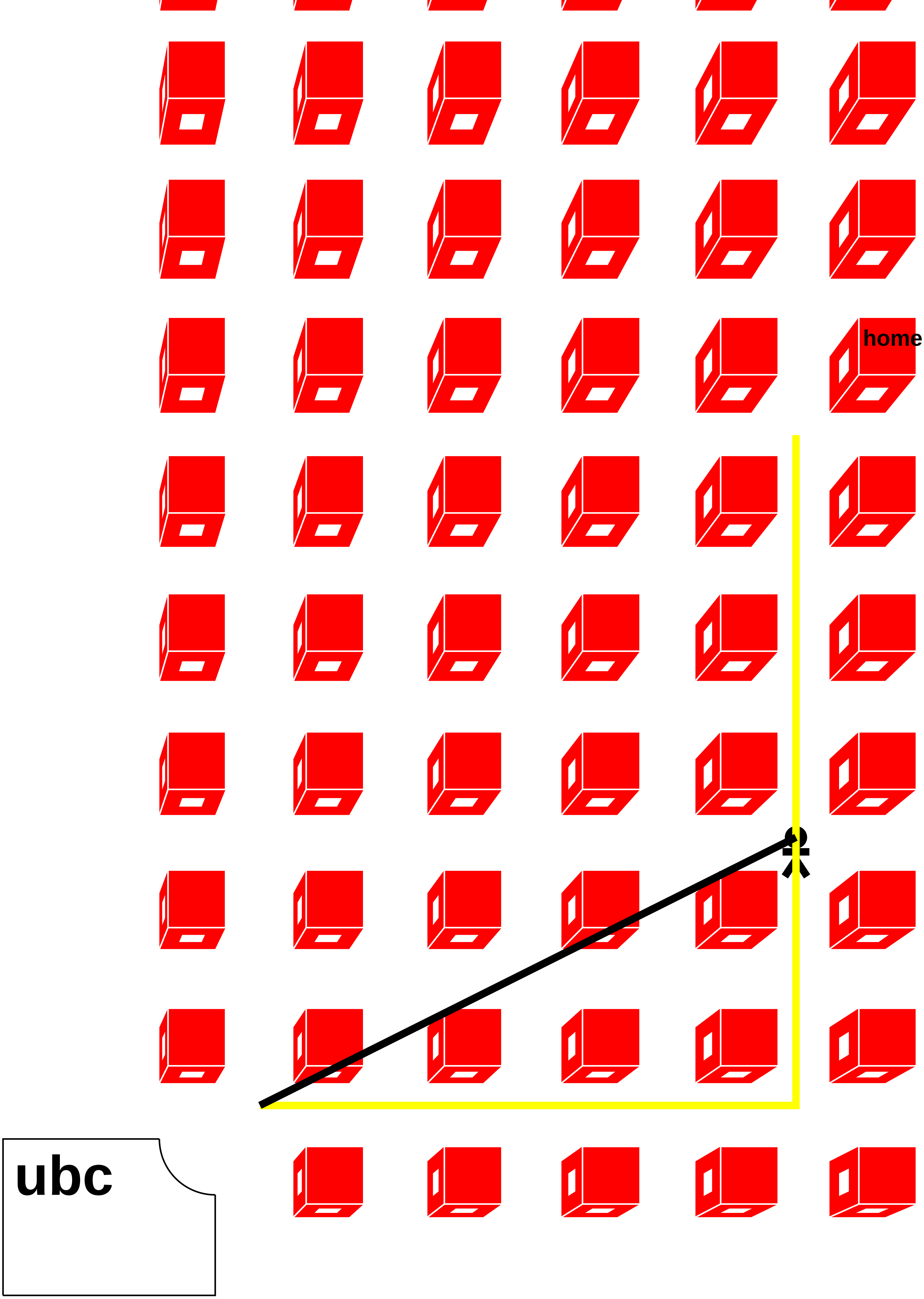
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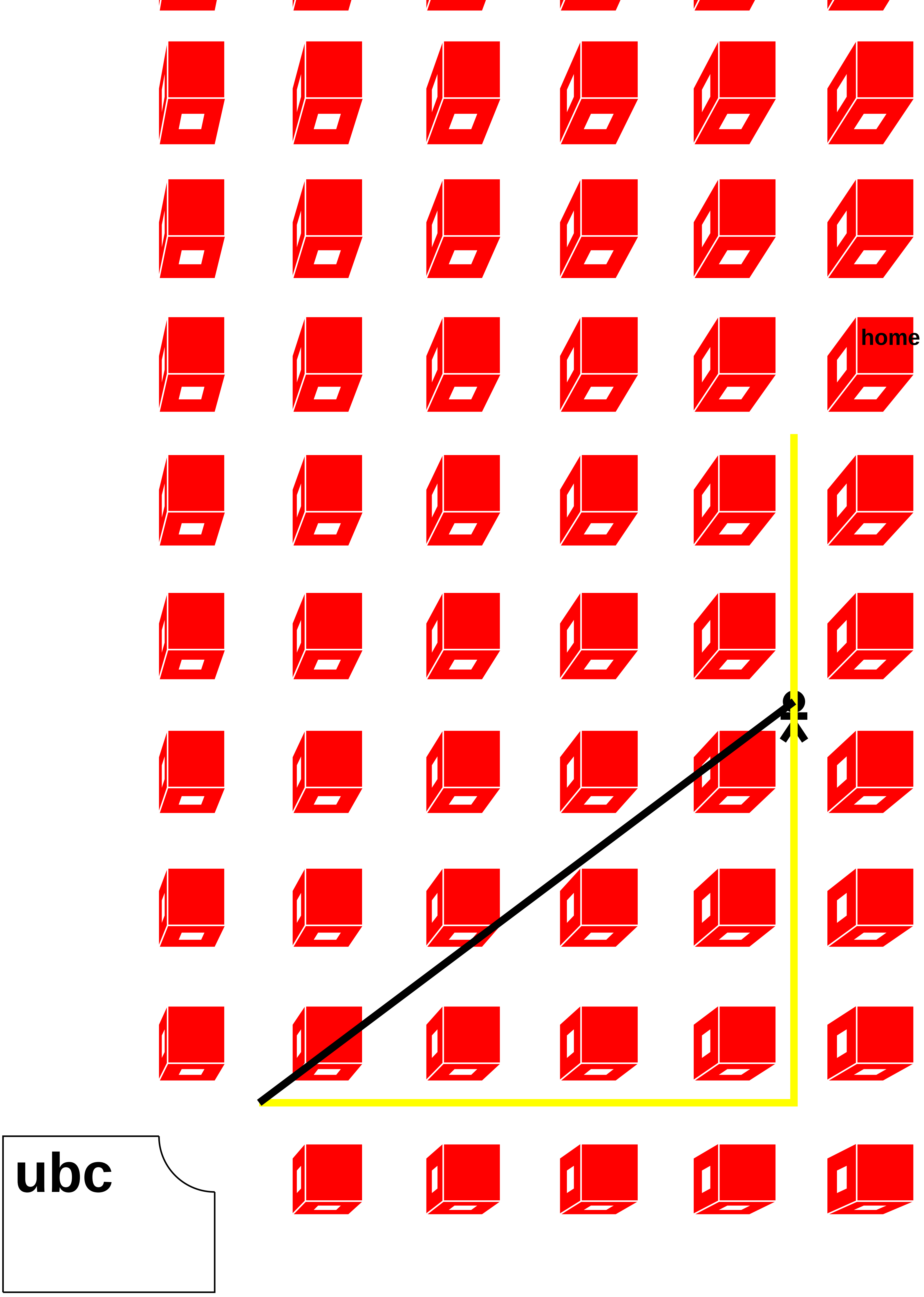
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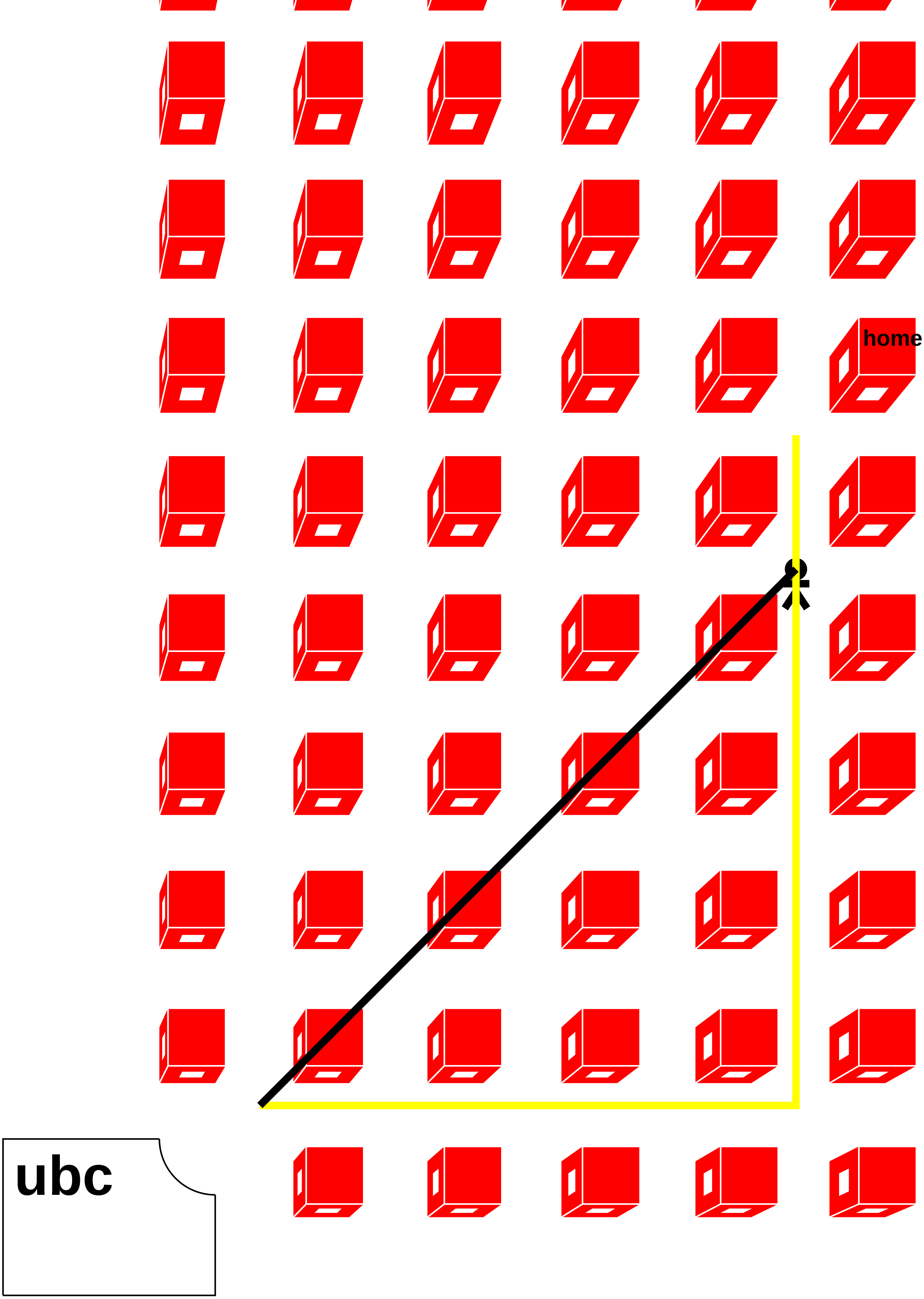
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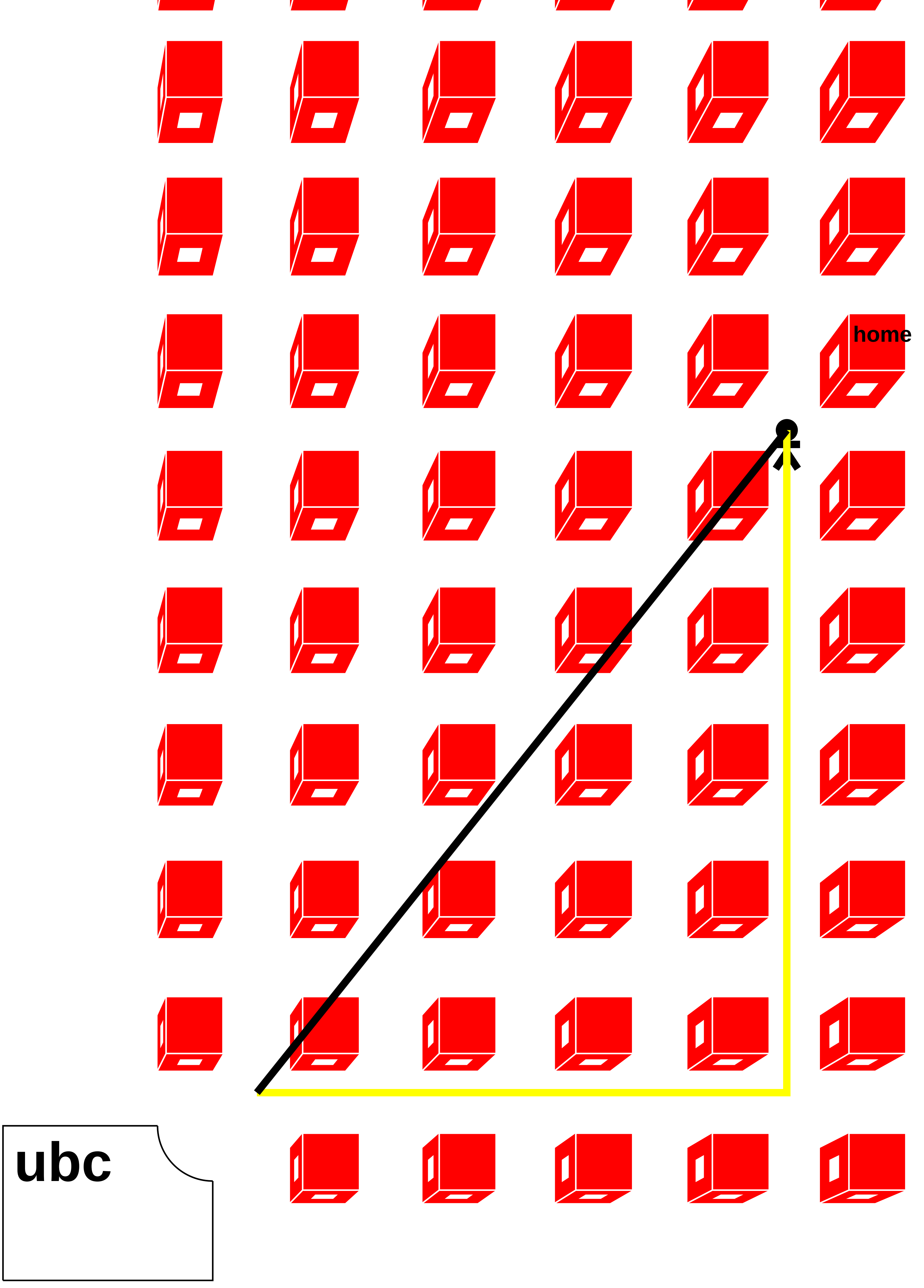
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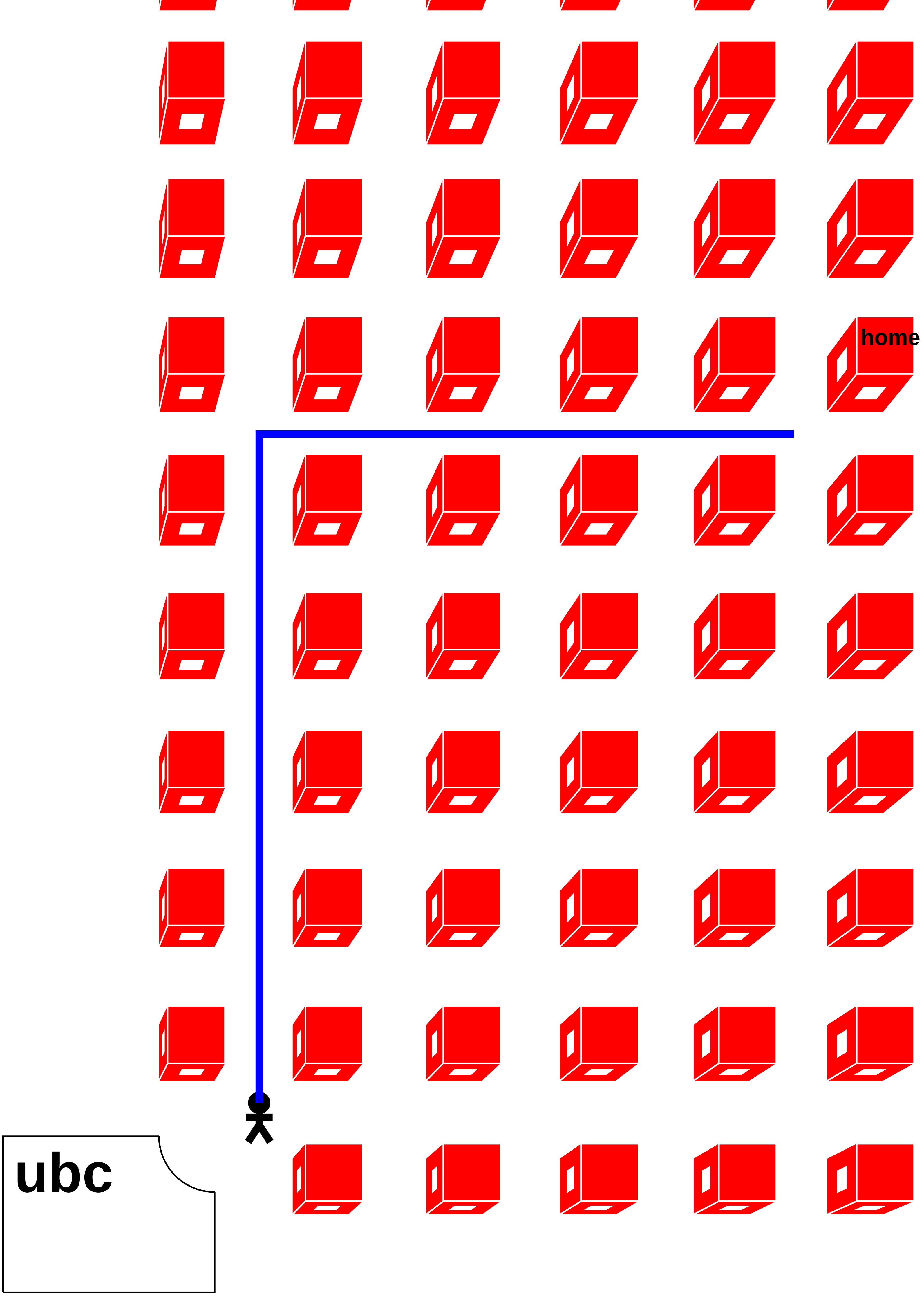
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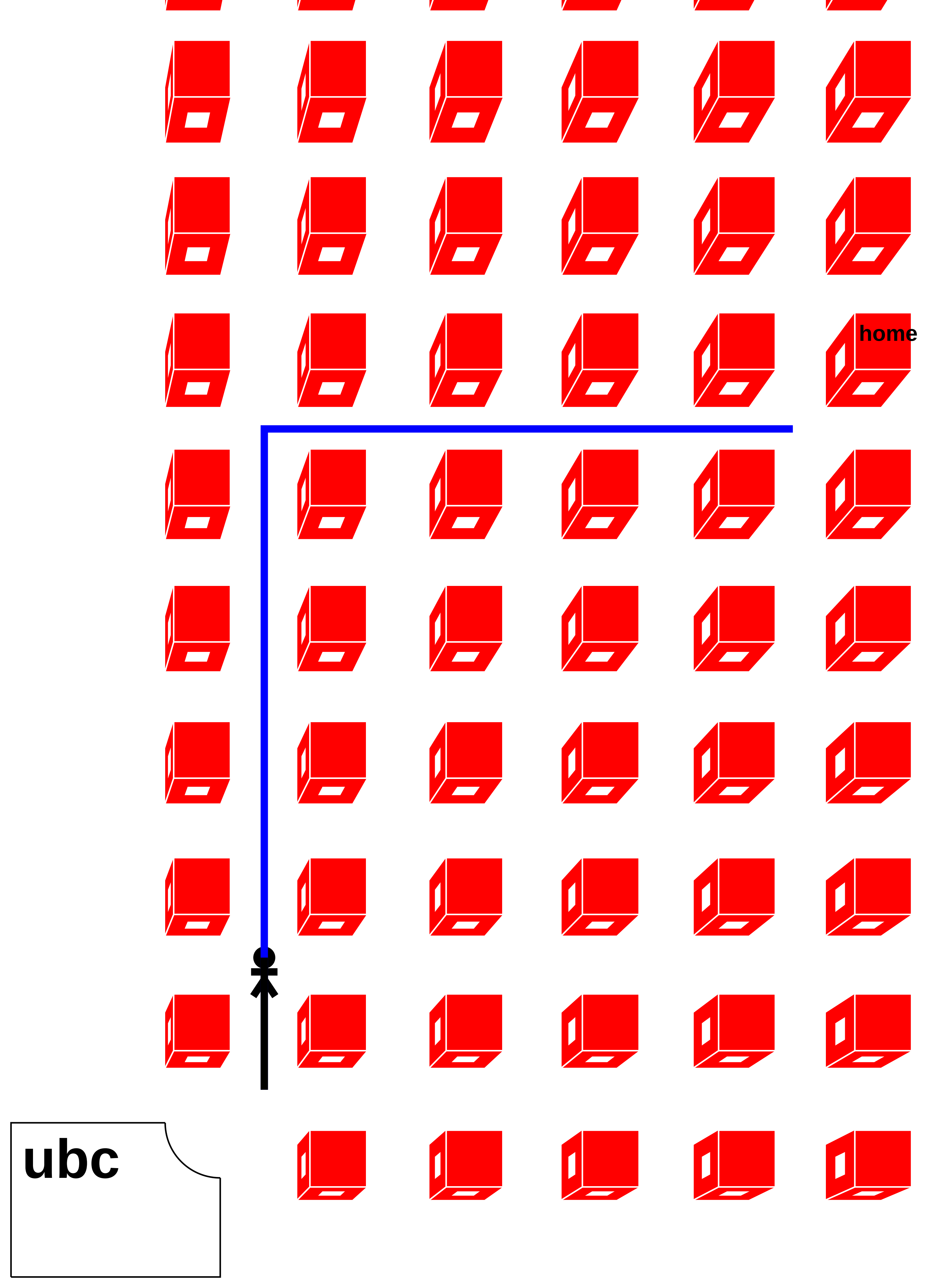
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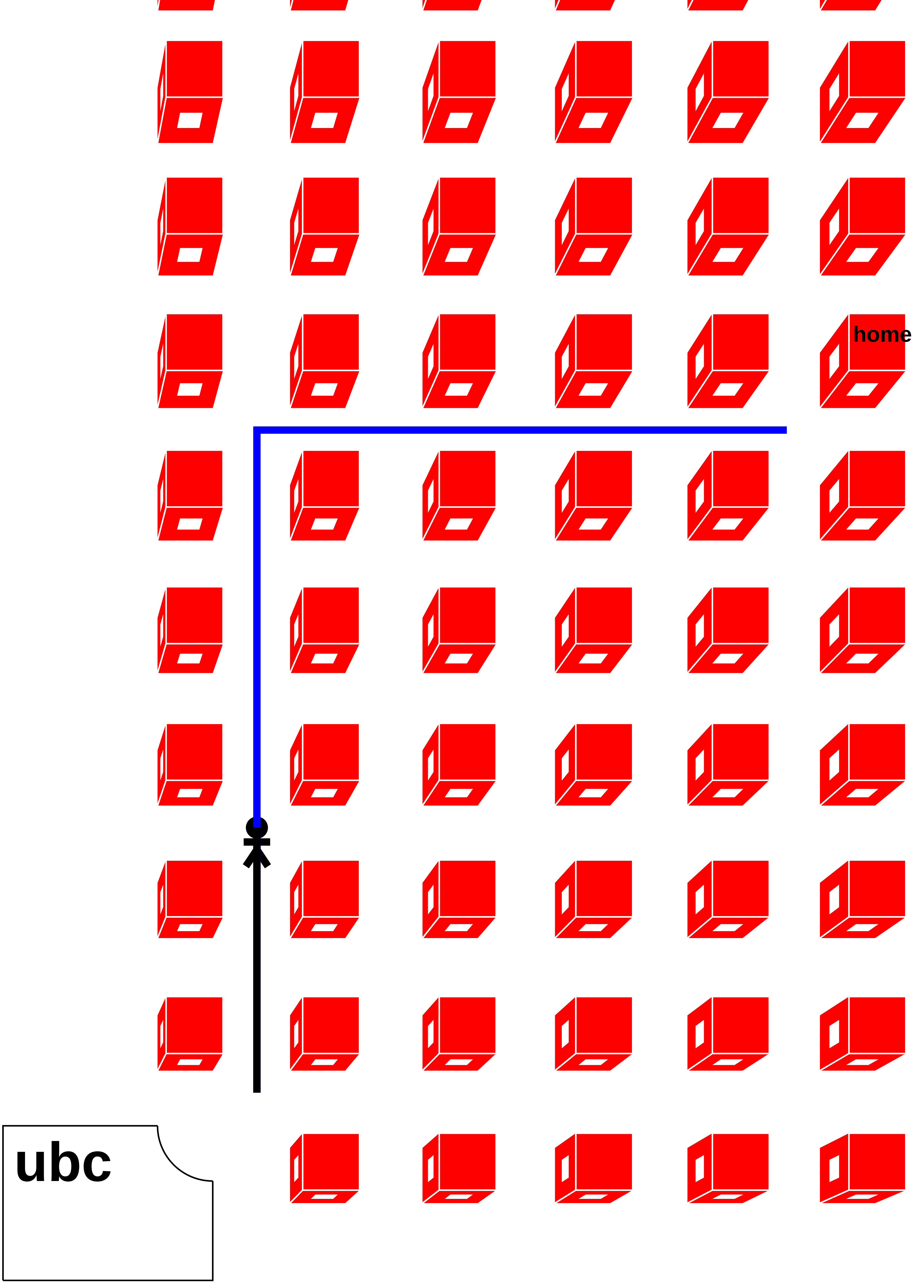
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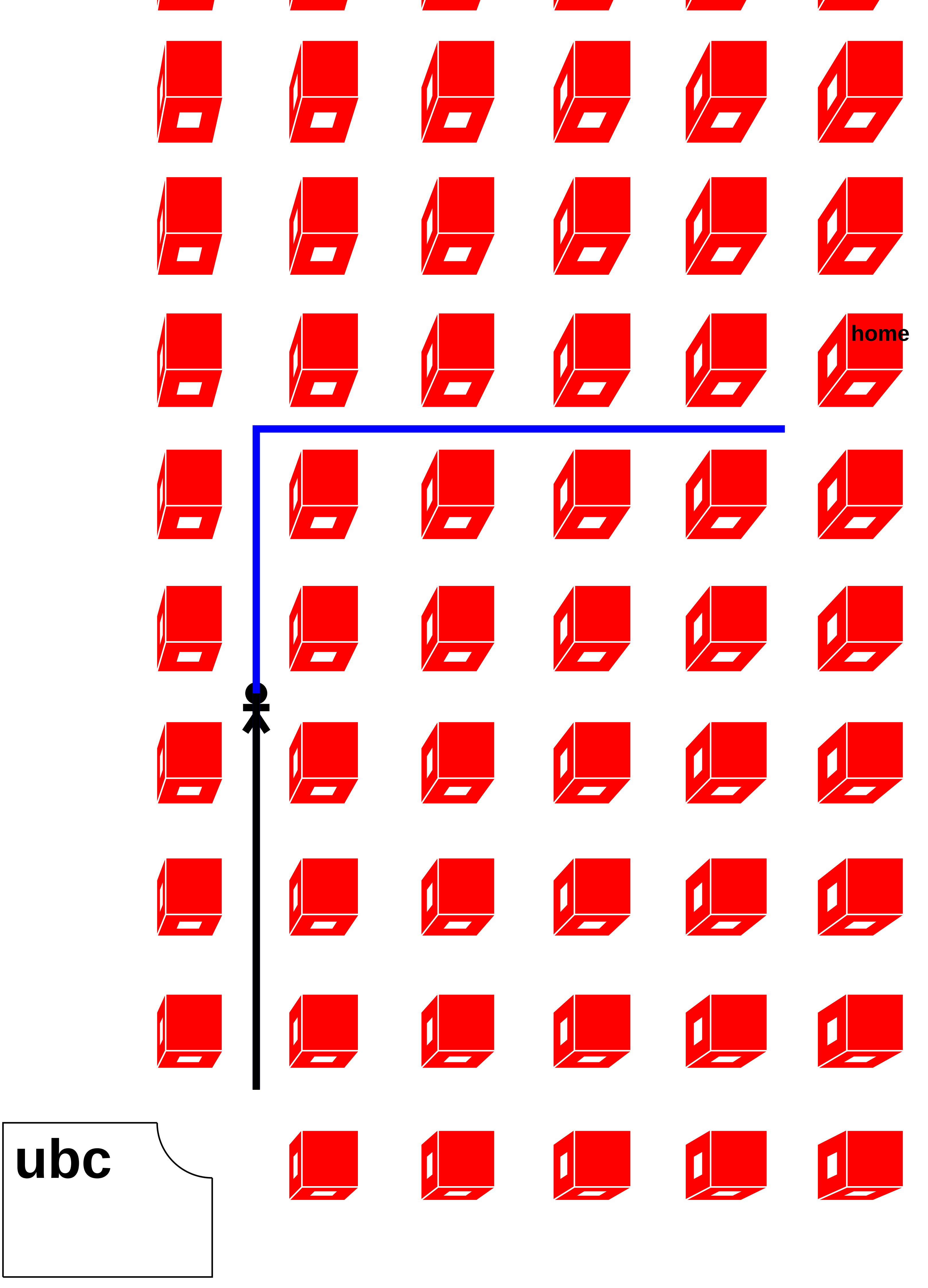
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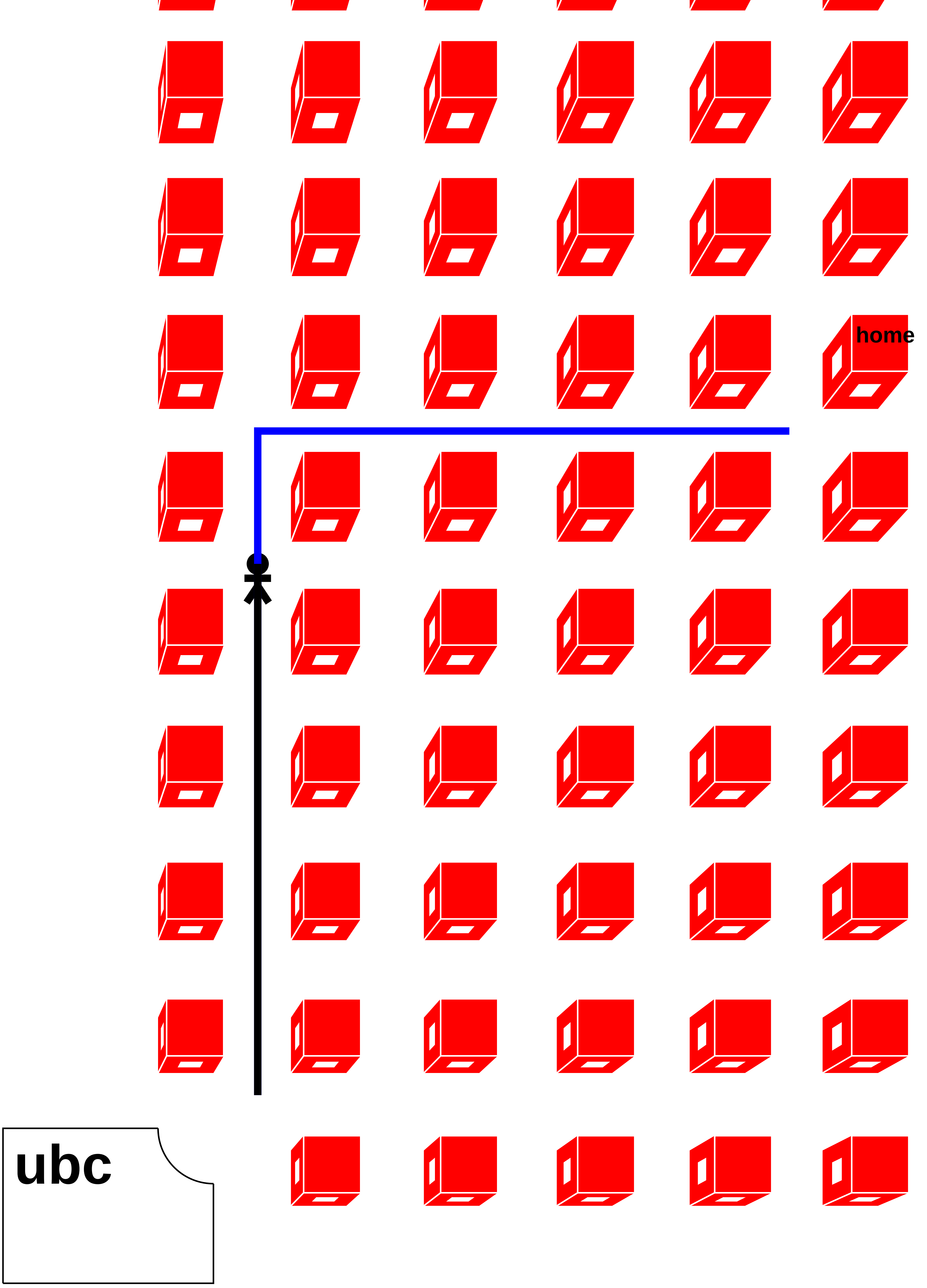
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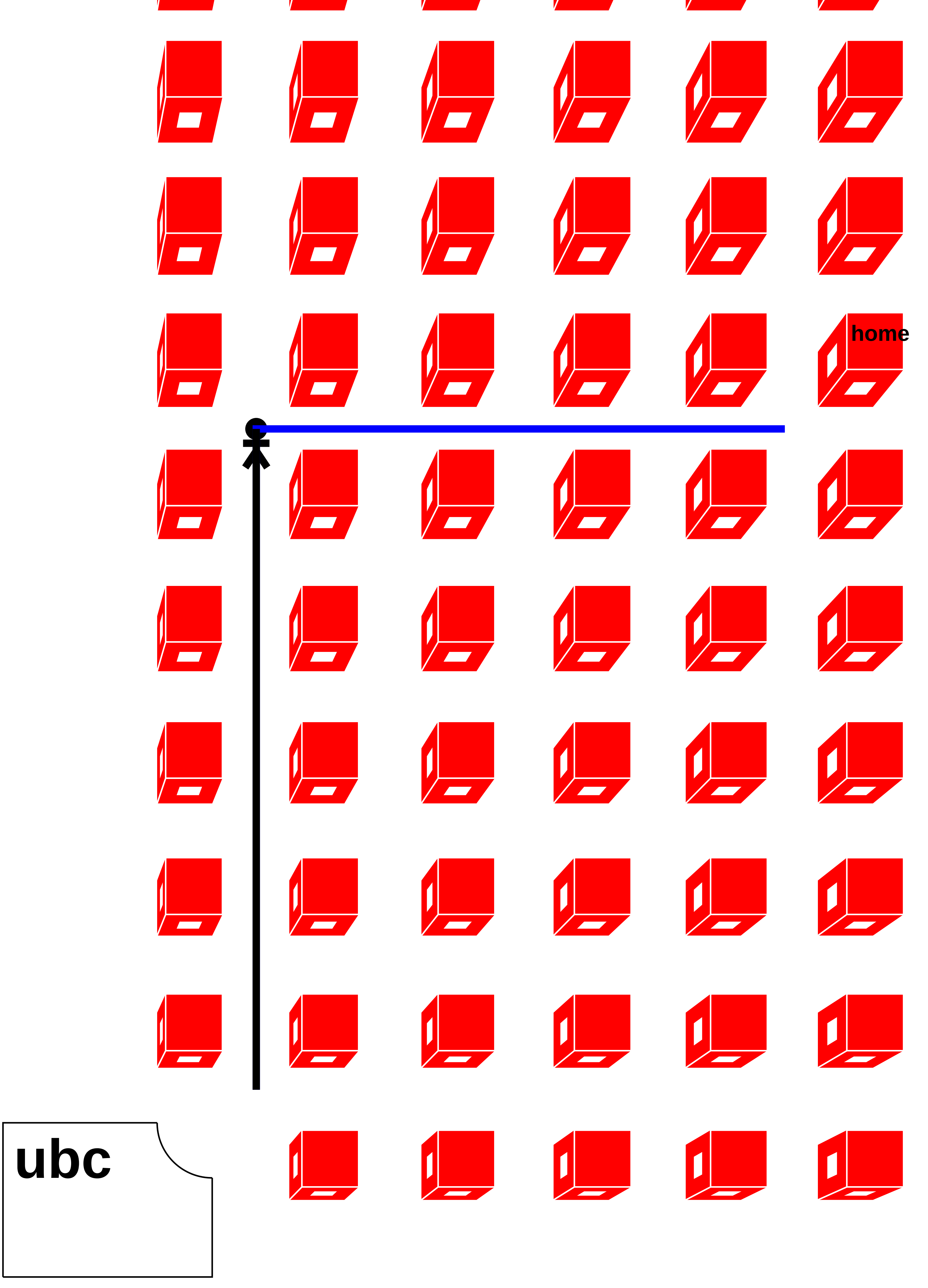
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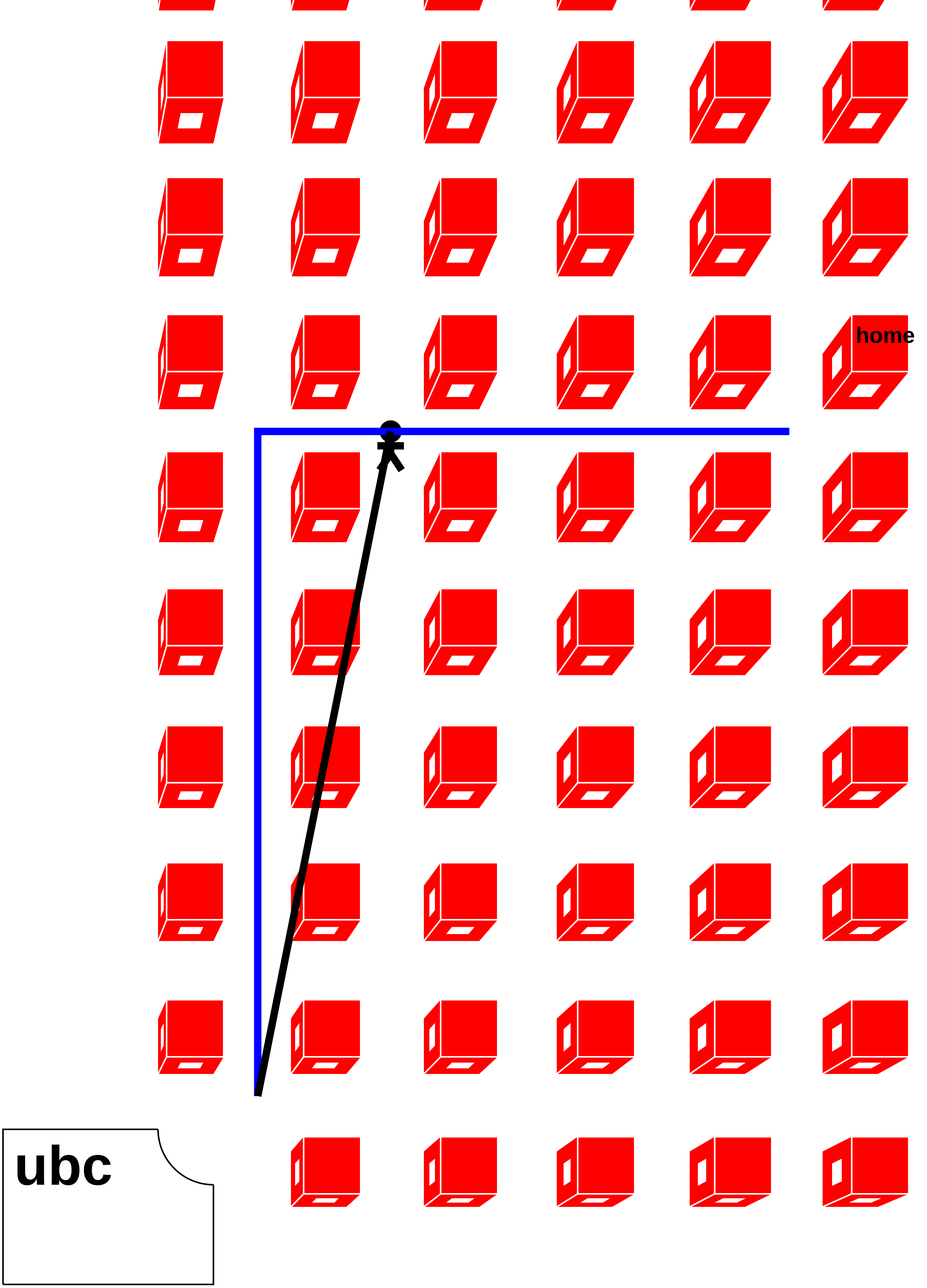
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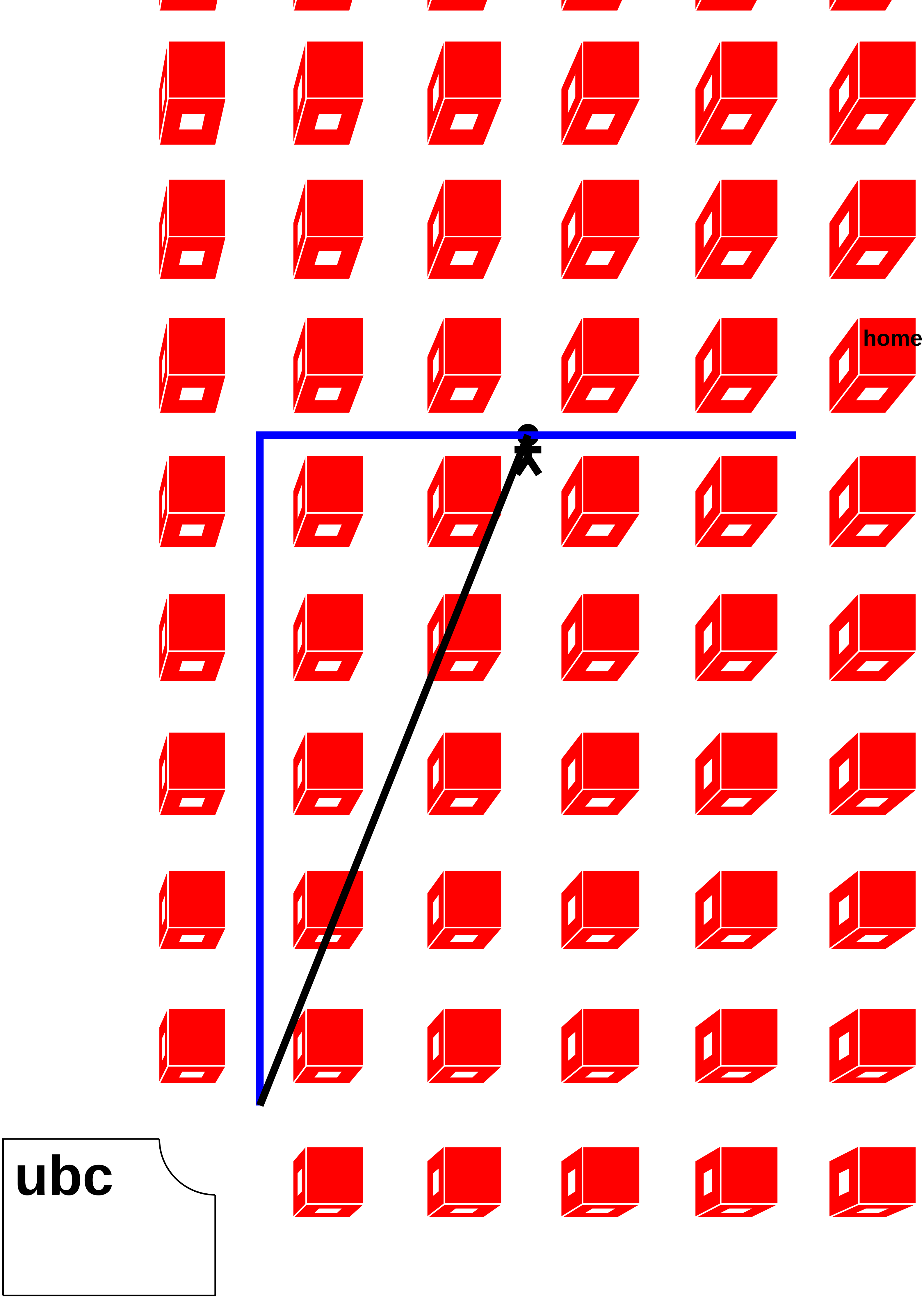
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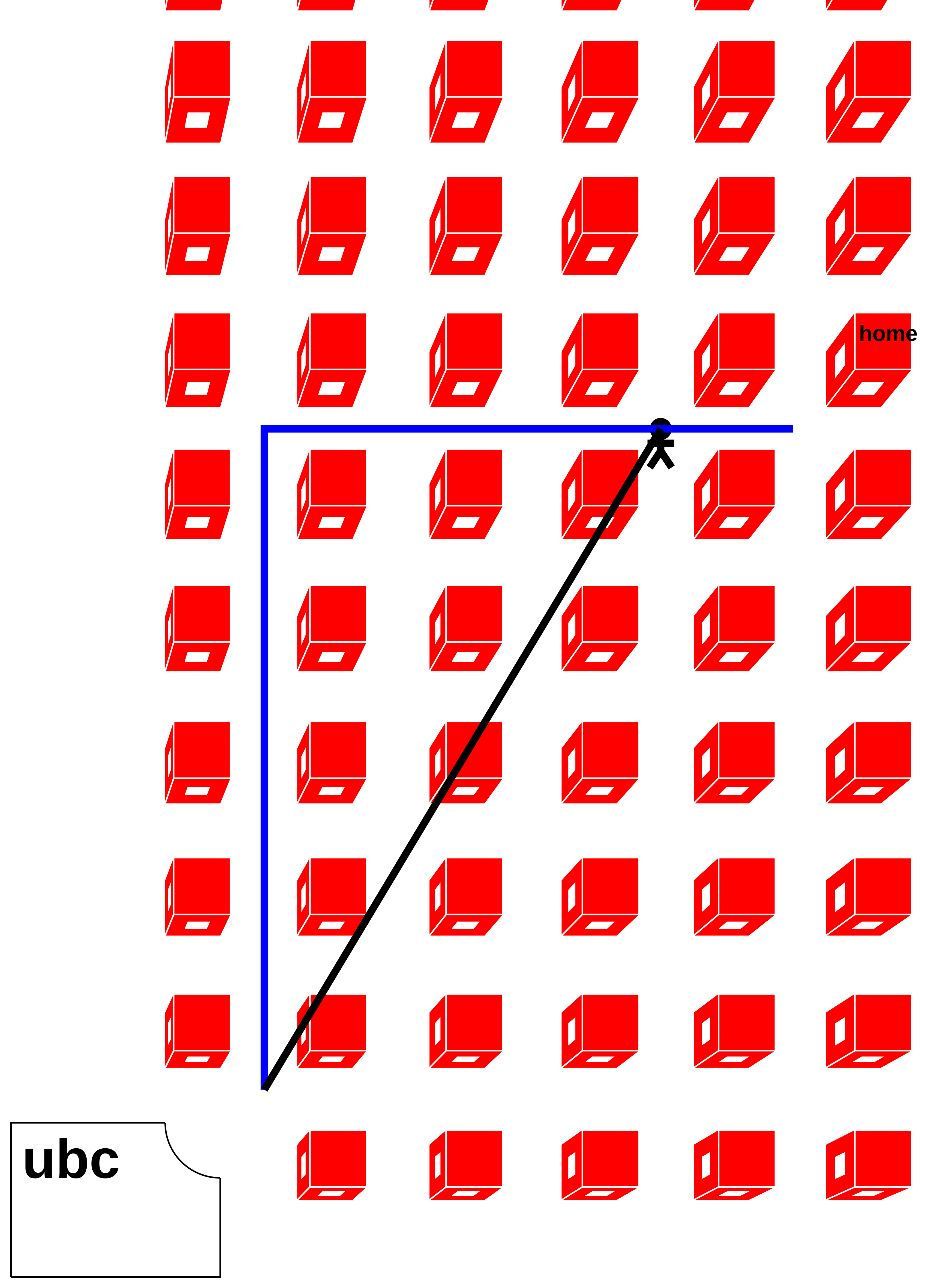
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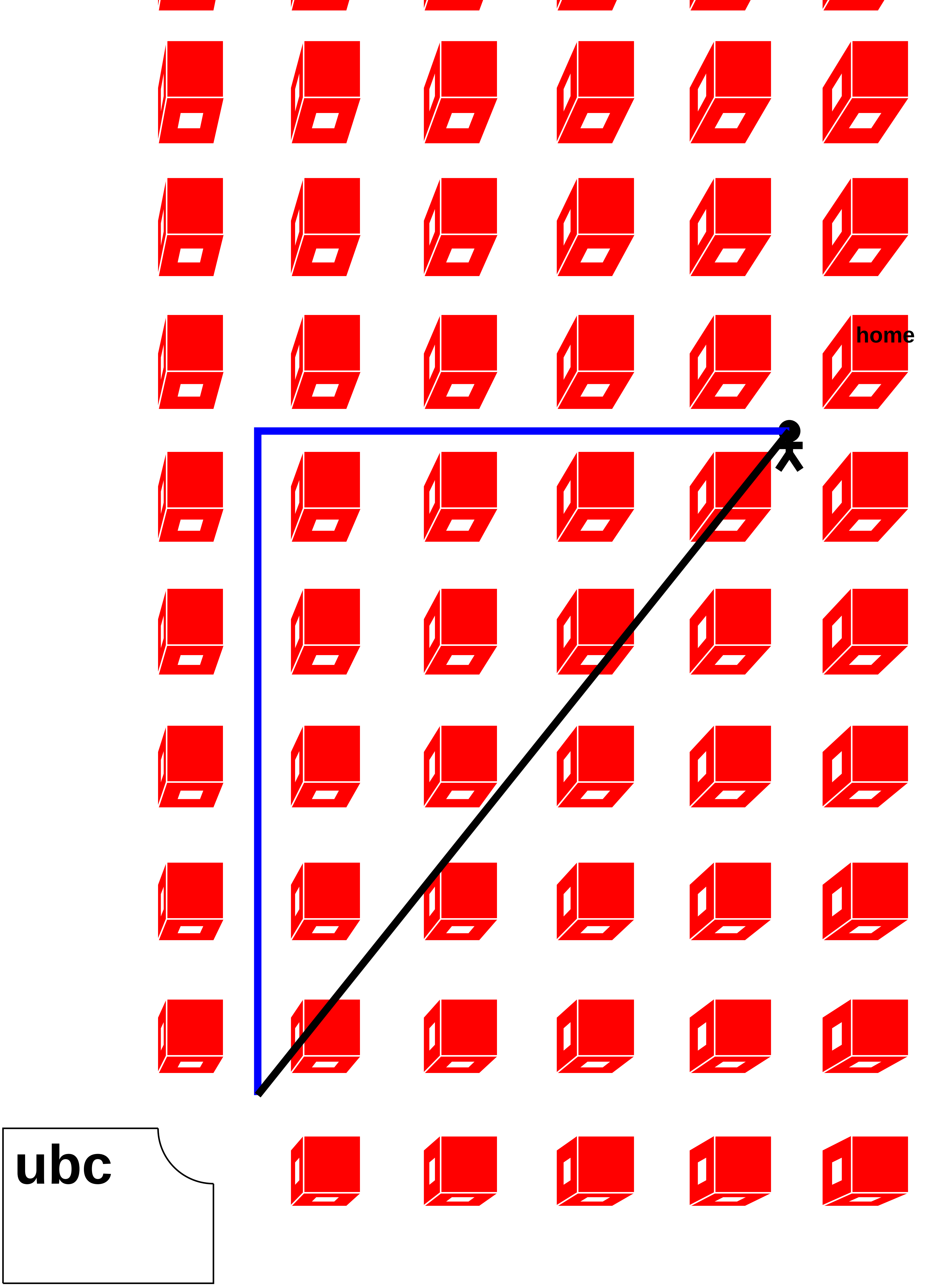
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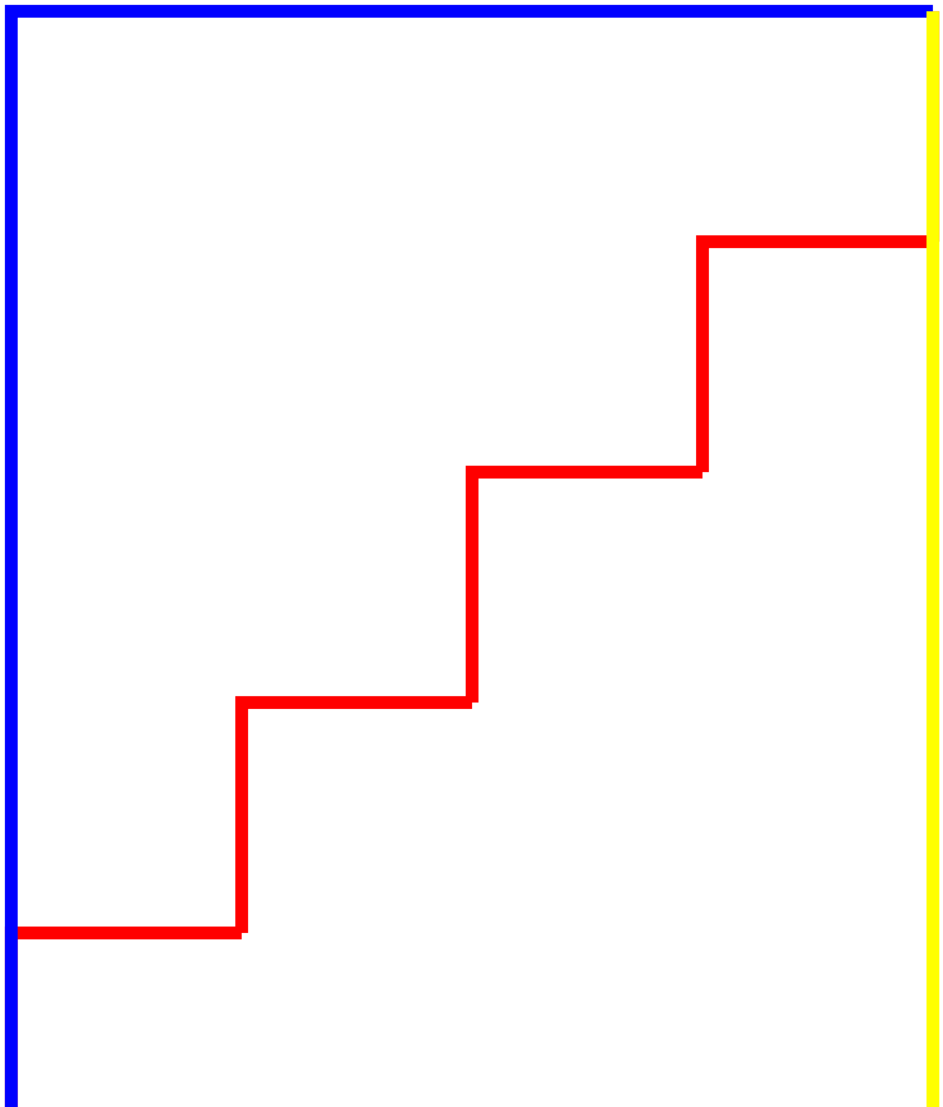
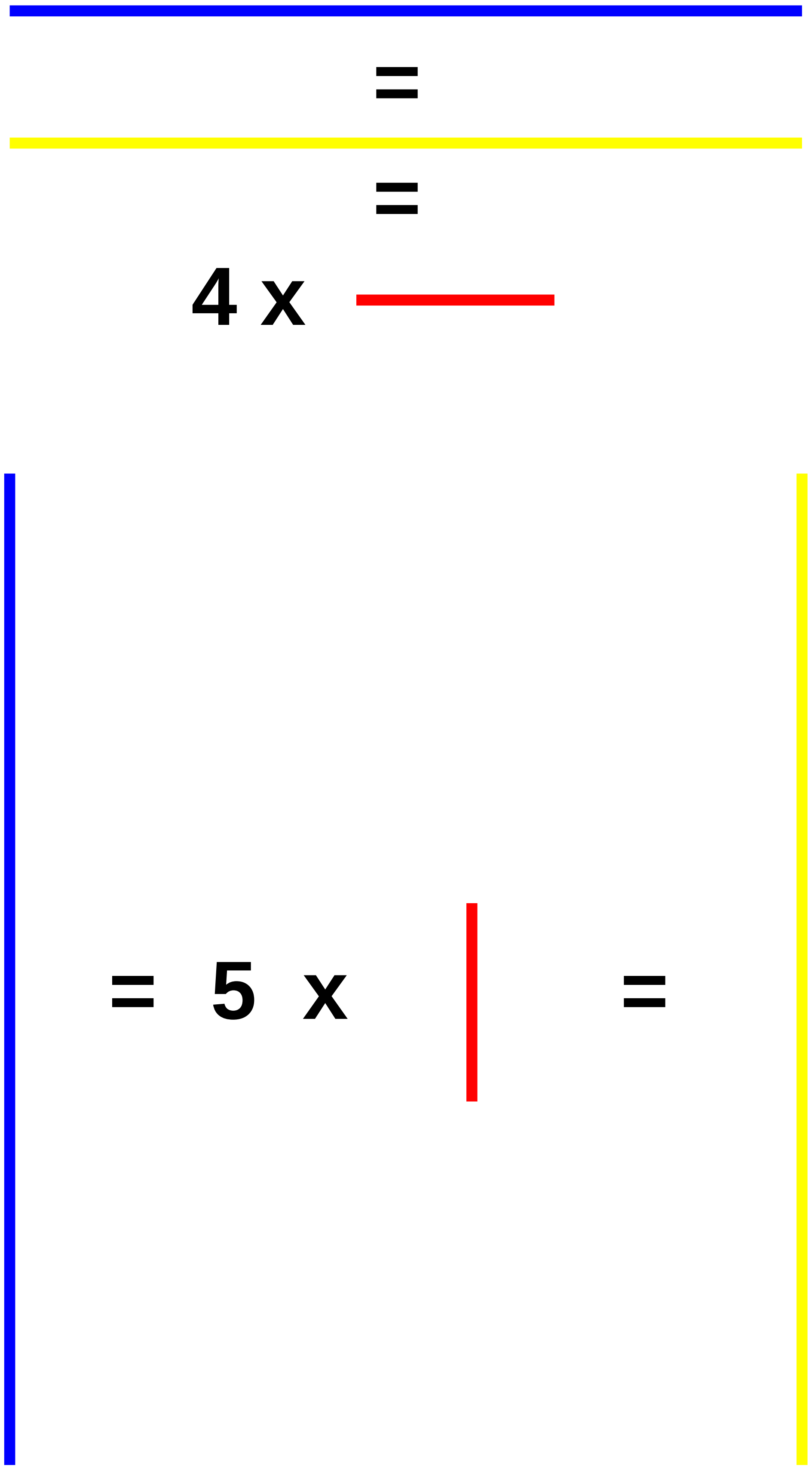



=
=
4 x
= 5 x
=

We have showed the 3 different routes are the same distance. What is the black line?

The black line represents at anytime the shortest distance from UBC to the student, because we know the shortest distance between two points is the stright line from one to the other.

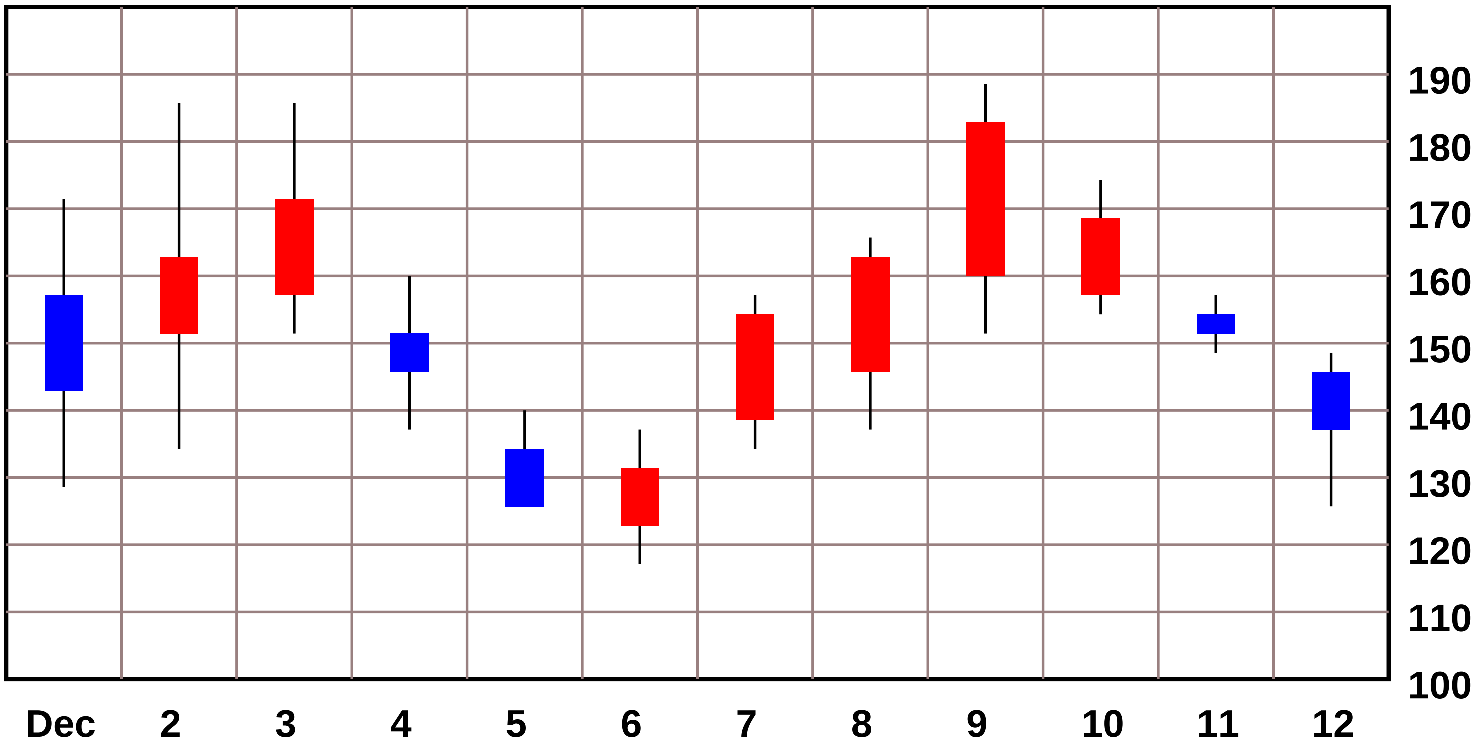
But this short-cut is not achievable since we cannot walk through someone’s house.

We conclude there is not a short-cut from A to B in a city where streets are perfectly perpendicular to each other.

Topic 2:

An introduction to understanding stock market chats and how they are created.

UBC

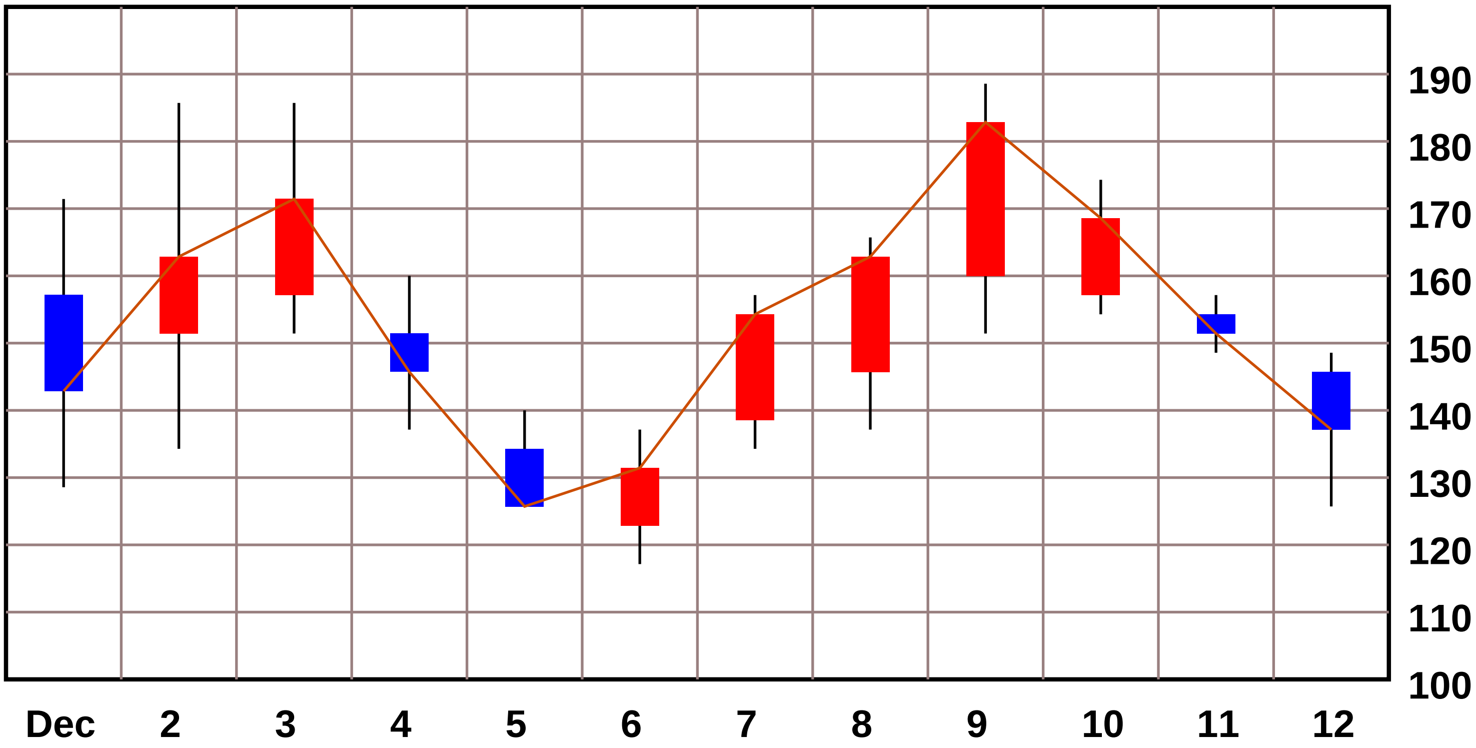


This is a chart of UBC's stock in December.

Candlestick indicator: The opening price is the top edge and closing price is bottom edge of the candle, if it's blue.   Vice versa if red.

EX: on Dec 2nd, open at 151, close at 163, high 186, low 135.

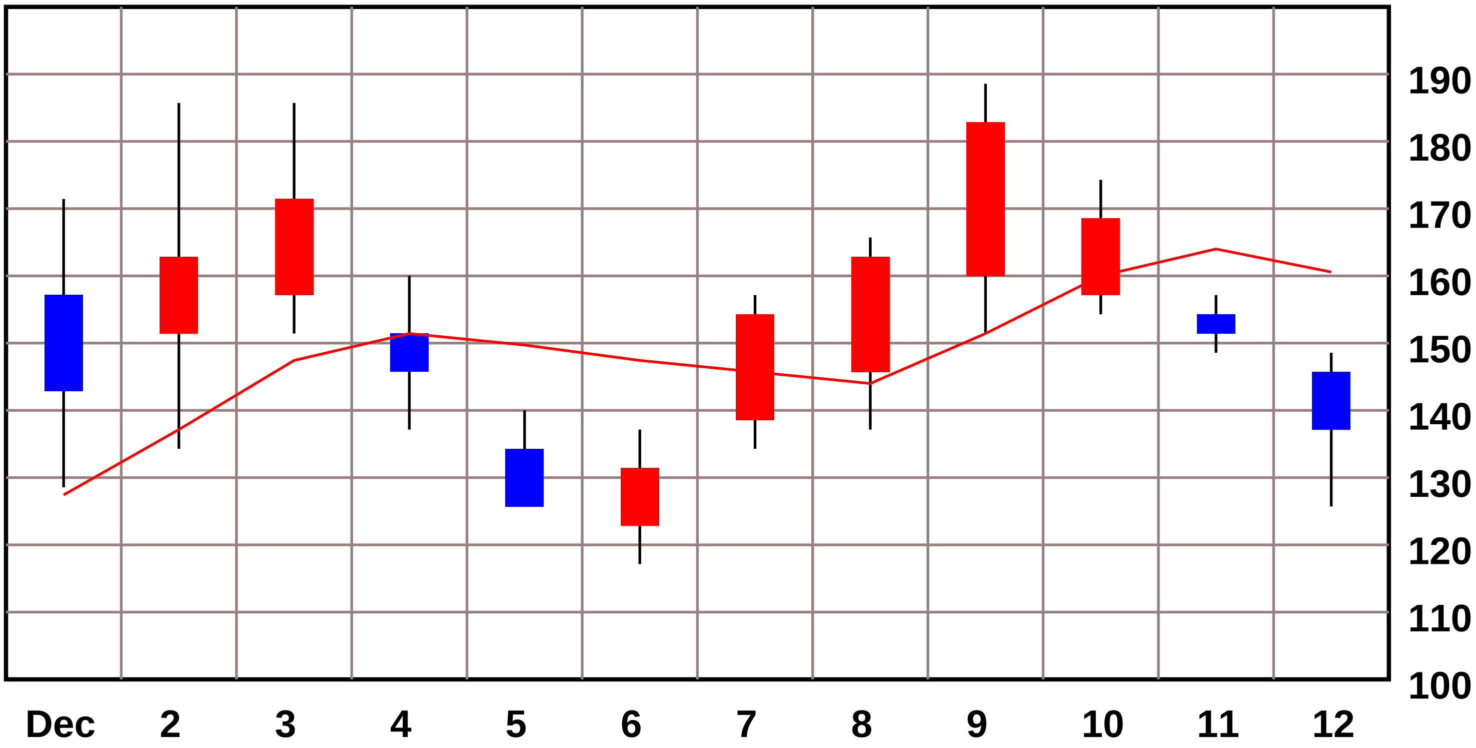
UBC



A Simple Moving Average (SMA) is calculated by adding the closing prices for the most recent n intervals of time (or "bars") and then dividing by n. The SMA gives equal weight to each bar.

Above is an example of 1 day moving average.

UBC

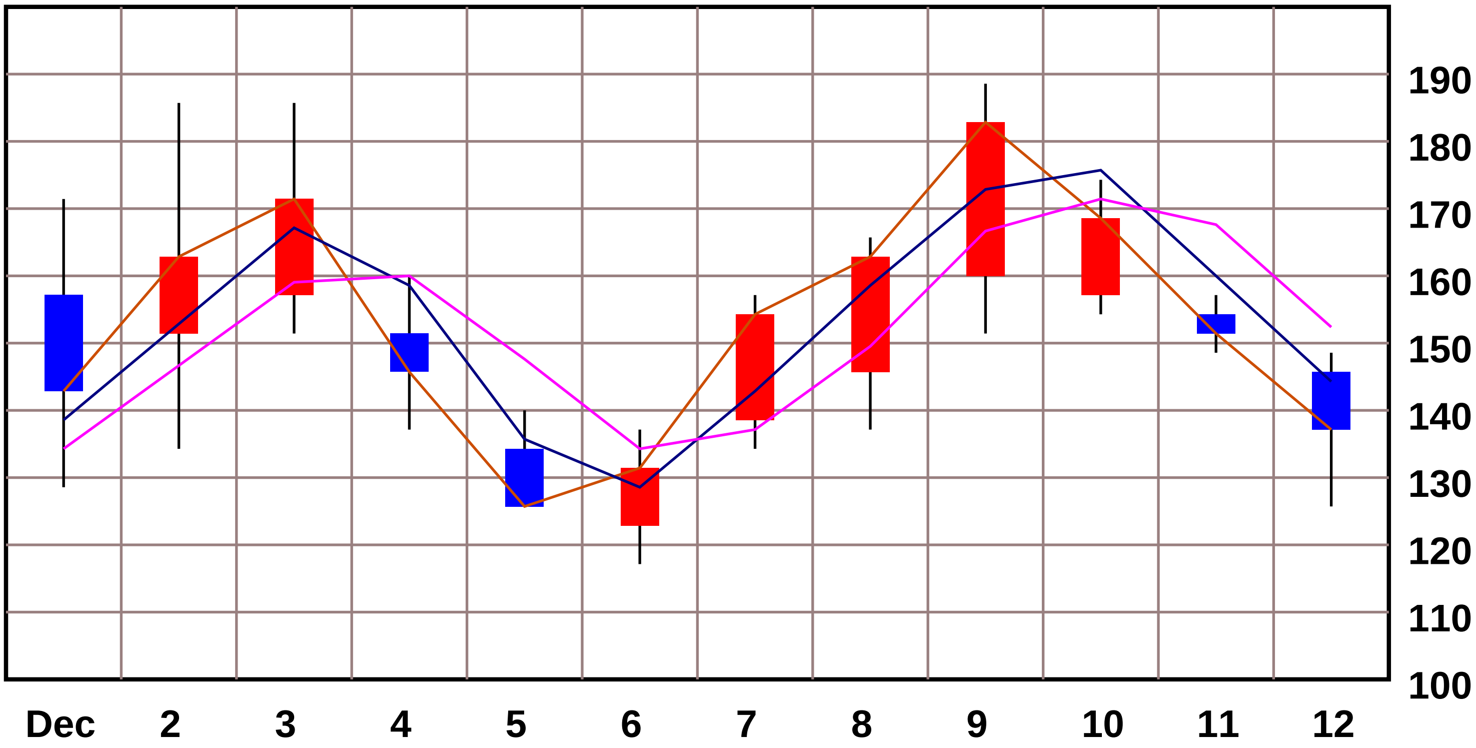


A Simple Moving Average (SMA) is calculated by adding the closing prices for the most recent n intervals of time (or "bars") and then dividing by n. The SMA gives equal weight to each bar.

Above is an example of 5 day moving average.
To create it, we need to have the other 4 days data prior to Dec 1st.

It is the exact same idea to create 50 and 200 day moving averages which are most popularly used.

UBC



Above is an example of SMA(3-Line) moving average.

SMA 2 is twice the length of SMA 1 and SMA 3 is three times the length of SMA 1.

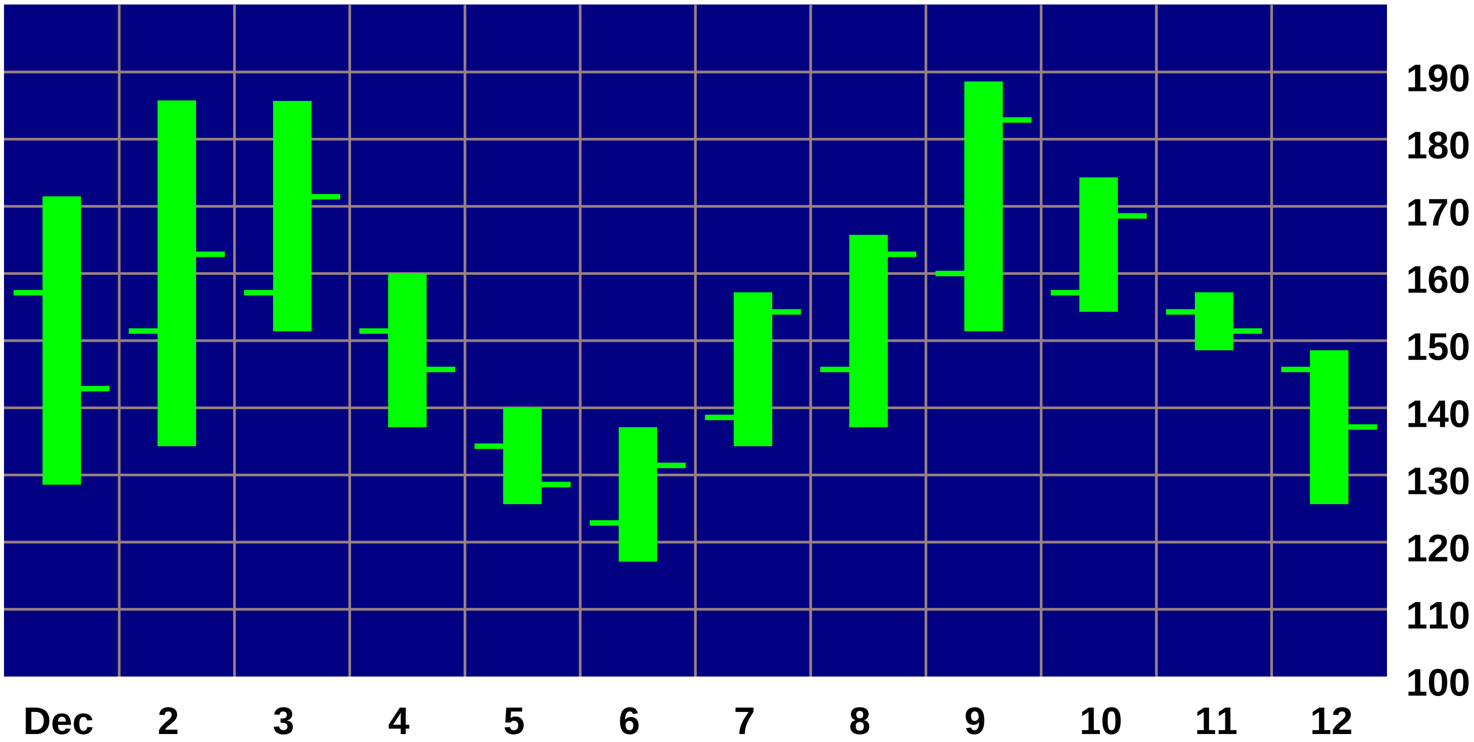
EX:if you choose "9" as the average period and select SMA (3-Line) ,it will plot three moving averages: 9 bars, 18 bars and 27 bars in length.

SMA 1:

SMA 2:

SMA 3:

UBC



This is a chart of UBC's stock in December.

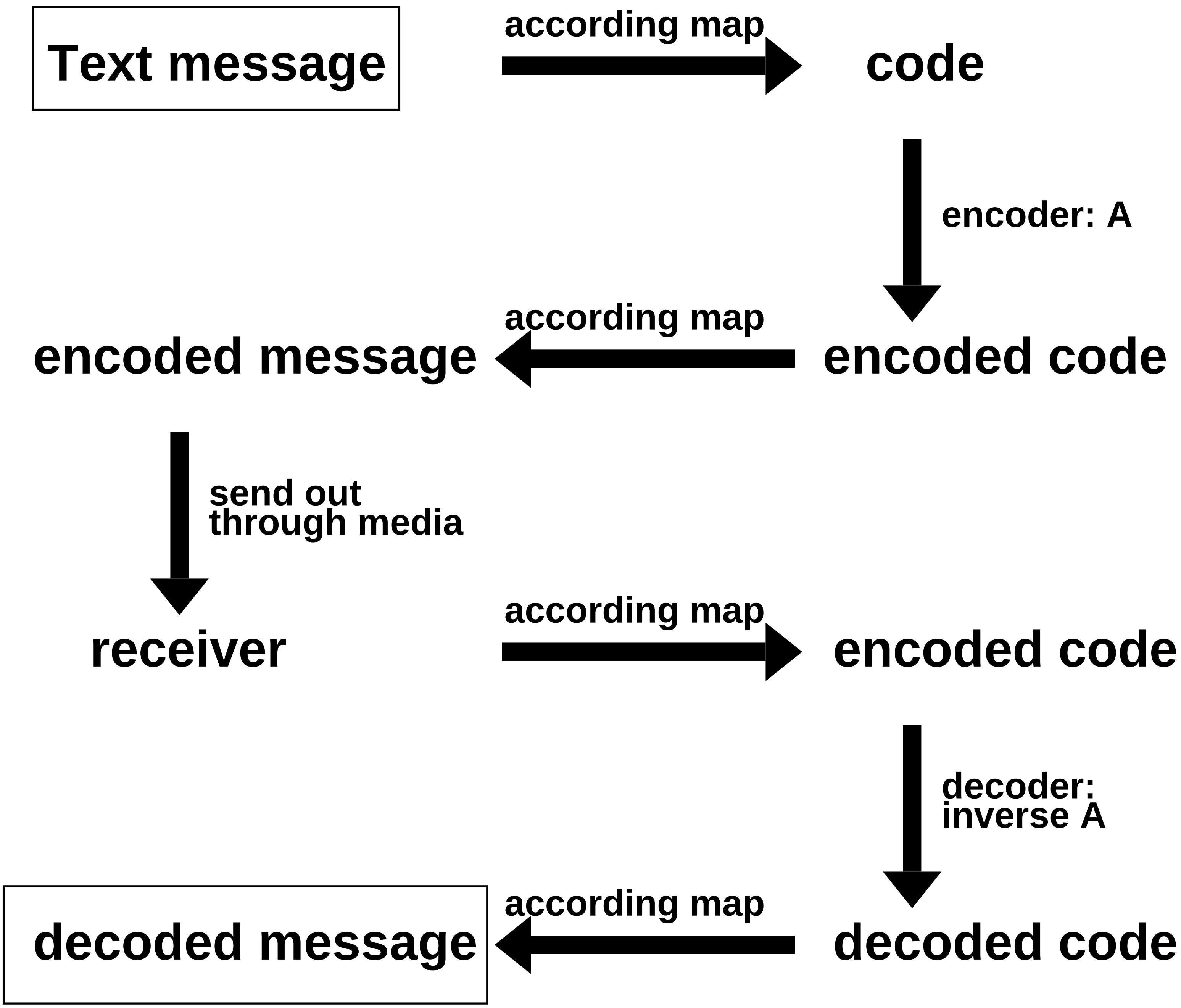
OHLC indicator: The highest price is the top and lowest price is bottom of the bar.

Opening price is on the left, close price on the right.

EX: on Dec 2nd, open at 151, close at 163, high 186, low 135.

Topic 3:

An introduction to understanding crytosystem and a simple example.



Map:

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

Example: all numbers (mod 26)

EGG: E=4 G=6 G=6

Encorder: $A = \begin{pmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 11 & 9 & 8 \end{pmatrix}$

(4 6 6)*A = (16 14 18)

16=Q 14=O 18=S QOS

SENT IT OUT

RECEIVER

QOS Q=16 O=14 S=18 (16 14 18)

INVERSE A = $\begin{pmatrix} 22 & 5 & 1 \\ 6 & 17 & 24 \\ 15 & 13 & 1 \end{pmatrix}$, **(16 14 18)*inverse**

= (4 6 6) = (EGG)