

	x=0.0	x=0.1	x=0.2	x=0.3	x=0.4	x=0.5	x=0.6	x=0.7	x=0.8	x=0.9	x=1.0
y=0.0	(0.0,0.0)	(0.1,0.0)	(0.2,0.0)	(0.3,0.0)	(0.4,0.0)	(0.5,0.0)	(0.6,0.0)	(0.7,0.0)	(0.8,0.0)	(0.9,0.0)	(1.0,0.0)
y=0.1	(0.0,0.1)	(0.1,0.1)	(0.2,0.1)	(0.3,0.1)	(0.4,0.1)	(0.5,0.1)	(0.6,0.1)	(0.7,0.1)	(0.8,0.1)	(0.9,0.1)	(1.0,0.1)
y=0.2	(0.0,0.2)	(0.1,0.2)	(0.2,0.2)	(0.3,0.2)	(0.4,0.2)	(0.5,0.2)	(0.6,0.2)	(0.7,0.2)	(0.8,0.2)	(0.9,0.2)	(1.0,0.2)
y=0.3	(0.0,0.3)	(0.1,0.3)	(0.2,0.3)	(0.3,0.3)	(0.4,0.3)	(0.5,0.3)	(0.6,0.3)	(0.7,0.3)	(0.8,0.3)	(0.9,0.3)	(1.0,0.3)
y=0.4	(0.0,0.4)	(0.1,0.4)	(0.2,0.4)	(0.3,0.4)	(0.4,0.4)	(0.5,0.4)	(0.6,0.4)	(0.7,0.4)	(0.8,0.4)	(0.9,0.4)	(1.0,0.4)
y=0.5	(0.0,0.5)	(0.1,0.5)	(0.2,0.5)	(0.3,0.5)	(0.4,0.5)	(0.5,0.5)	(0.6,0.5)	(0.7,0.5)	(0.8,0.5)	(0.9,0.5)	(1.0,0.5)
y=0.6	(0.0,0.6)	(0.1,0.6)	(0.2,0.6)	(0.3,0.6)	(0.4,0.6)	(0.5,0.6)	(0.6,0.6)	(0.7,0.6)	(0.8,0.6)	(0.9,0.6)	(1.0,0.6)
y=0.7	(0.0,0.7)	(0.1,0.7)	(0.2,0.7)	(0.3,0.7)	(0.4,0.7)	(0.5,0.7)	(0.6,0.7)	(0.7,0.7)	(0.8,0.7)	(0.9,0.7)	(1.0,0.7)
y=0.8	(0.0,0.8)	(0.1,0.8)	(0.2,0.8)	(0.3,0.8)	(0.4,0.8)	(0.5,0.8)	(0.6,0.8)	(0.7,0.8)	(0.8,0.8)	(0.9,0.8)	(1.0,0.8)
y=0.9	(0.0,0.9)	(0.1,0.9)	(0.2,0.9)	(0.3,0.9)	(0.4,0.9)	(0.5,0.9)	(0.6,0.9)	(0.7,0.9)	(0.8,0.9)	(0.9,0.9)	(1.0,0.9)
y=1.0	(0.0,1.0)	(0.1,1.0)	(0.2,1.0)	(0.3,1.0)	(0.4,1.0)	(0.5,1.0)	(0.6,1.0)	(0.7,1.0)	(0.8,1.0)	(0.9,1.0)	(1.0,1.0)

There's some explanation of how data normalization works in the context of constructing a graph from the incoming data.

When we receive raw income data, it usually consists of numerical values that can vary significantly depending on the range of the data. We normalize the data to plot these values on a graph with consistent proportions and a clear visual representation. Here's how the process works:

1. Normalization - a process of transforming data values to fit within a standard range, typically between 0 and 1. This ensures that all data points are scaled proportionally, making it easier to visualize and compare trends on a graph regardless of their original scale.

For example, if the income data spans values between \$0 and \$100,000, each income value is normalized using this formula:

$$\text{Normalized Value} = \frac{\text{Actual Value} - \text{Minimum Value}}{\text{Maximum Value} - \text{Minimum Value}}$$

Using this approach, the minimum income value (e.g., \$0) will be represented as 0, and the maximum value (e.g., \$100,000) will be represented as 1. All other values will fall proportionally between 0 and 1.

2. Once the data is normalized:

- The **X-axis** represents the time intervals (days, months, years).
- The **Y-axis** represents the normalized income values (ranging from 0 to 1).

Each normalized income value is then mapped to a corresponding position on the graph. For example:

- A normalized value of 0.5 would be plotted halfway along the Y-axis.
- A normalized value of 0.8 would be closer to the top of the Y-axis.

This ensures that the graph remains visually consistent and doesn't become skewed if the raw income data contains outliers or large variations.

We didn't have any incoming data in our project, but I decided to light up this point from the opposite side, just to understand how it works.