



This is a graded discussion: 10 points possible

due -

## Aggregation: Let's draw a histogram

2 19

Ok, you know the drill. Please draw two histograms by hand from the following tables. Pay very close attention to the details of your histogram. :)

The first table captures some distribution of integer scores:

Score	Frequency
0-199	5
200-399	29
400-599	56
600-799	17
800-999	3

The second one here. Say this is about the number of hours people play video games (Note how the data range is split).

Hours	Frequency
0-1	4,300
1-3	6,900
<b>3-5</b>	4,900
<b>5-10</b>	2,000
<b>10-24</b>	2,100

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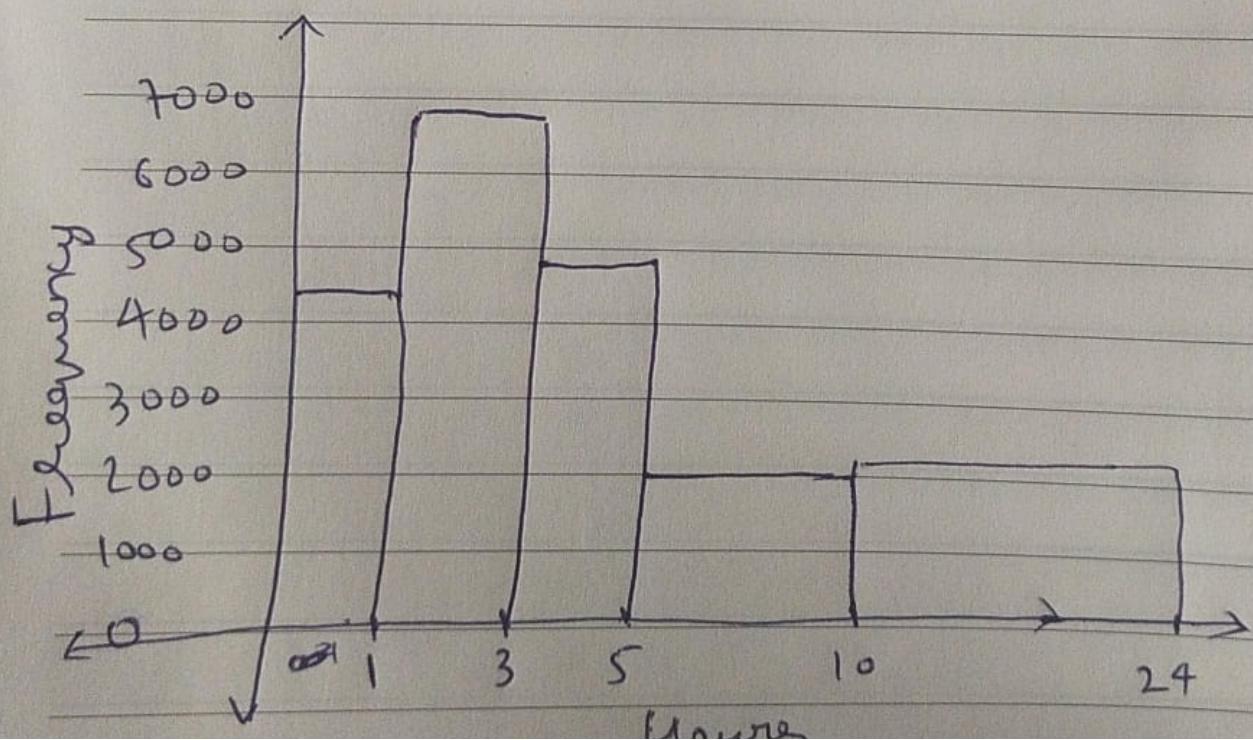
Monday

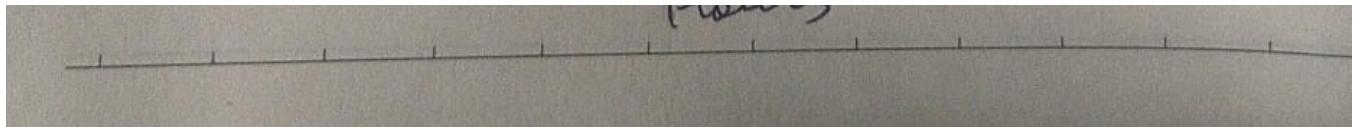
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Date : \_\_\_\_\_



Histogram 2





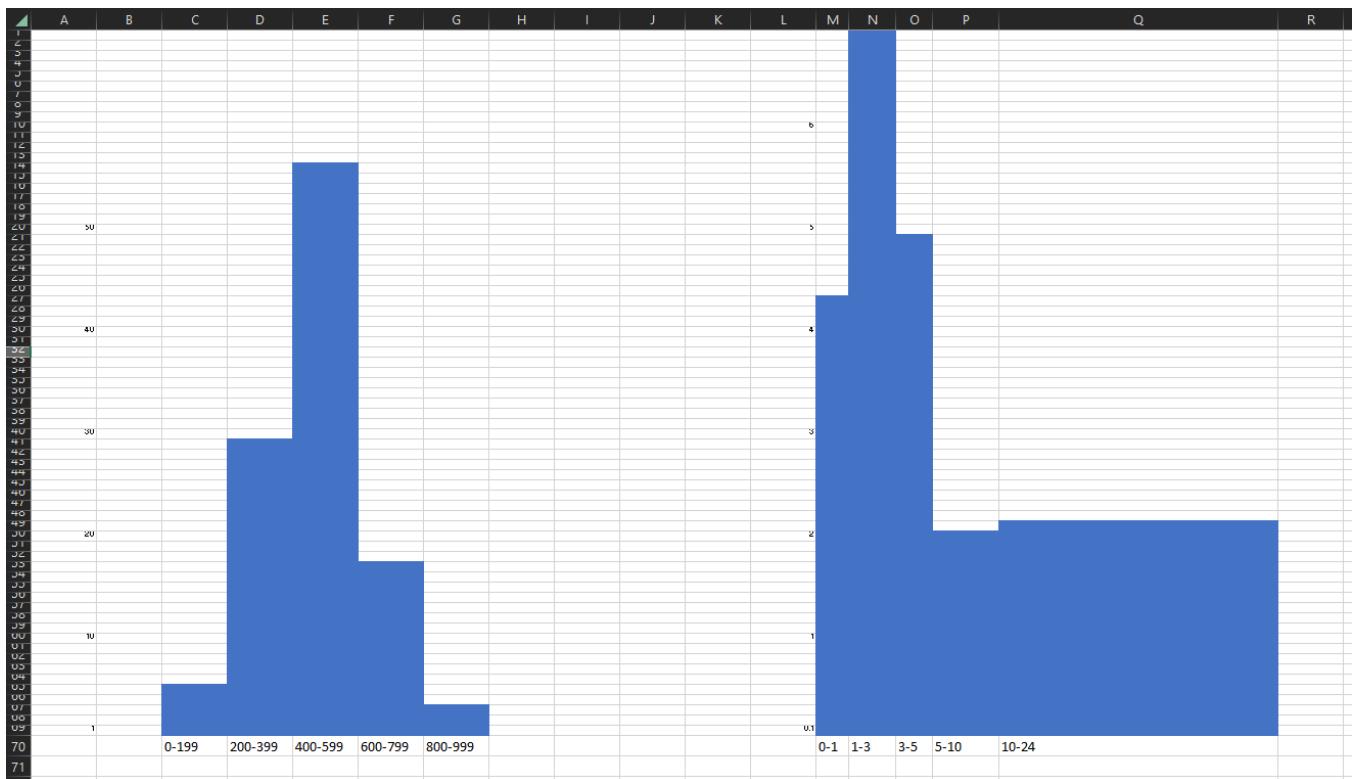
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**Dustin Cole** (<https://iu.instructure.com/courses/2165942/users/6701715>)

⋮

Monday



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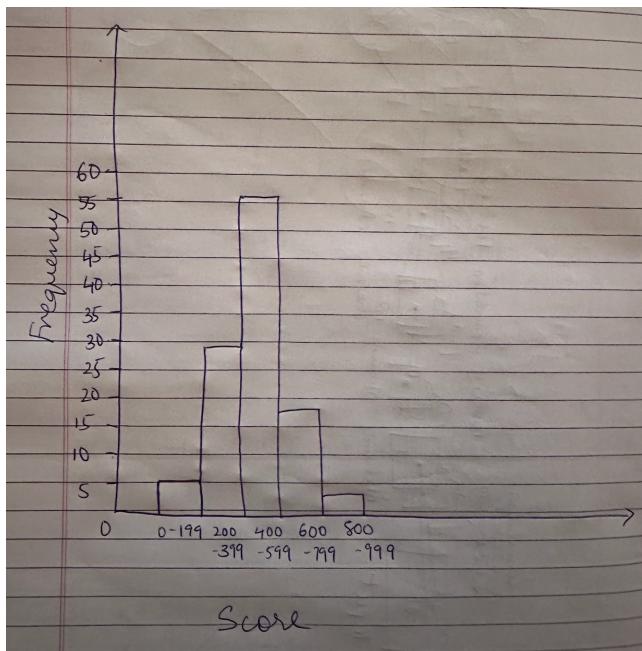


**Sneha Satish** (<https://iu.instructure.com/courses/2165942/users/6679606>)

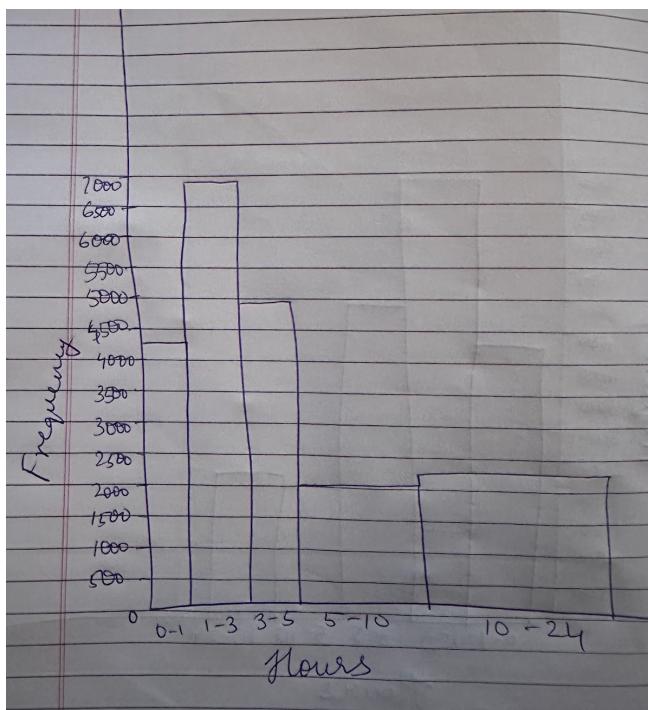
⋮

Tuesday

This is the first histogram:



This is the second histogram:



Edited by [Sneha Satish](https://iu.instructure.com/courses/2165942/users/6679606) (<https://iu.instructure.com/courses/2165942/users/6679606>) on Sep 19 at 3:56pm

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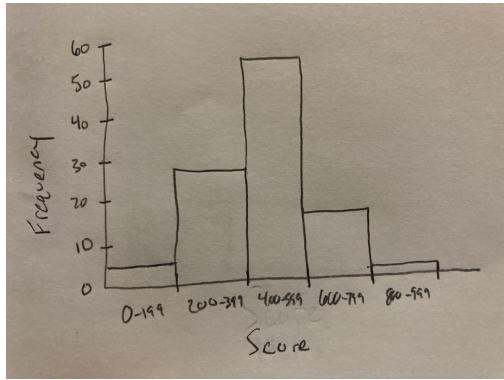


[Thomas Jablenski](https://iu.instructure.com/courses/2165942/users/6701599) (<https://iu.instructure.com/courses/2165942/users/6701599>)

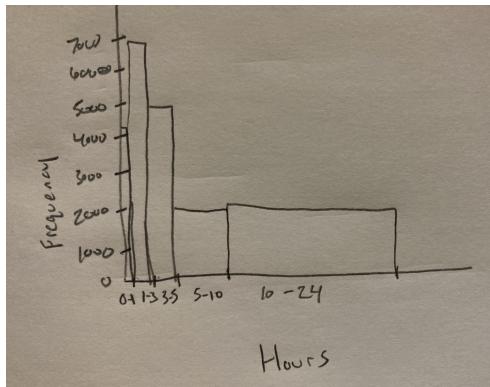
Tuesday

...

For the first dataset I came up with this histogram:



For the second dataset I came up with this histogram:



Reply

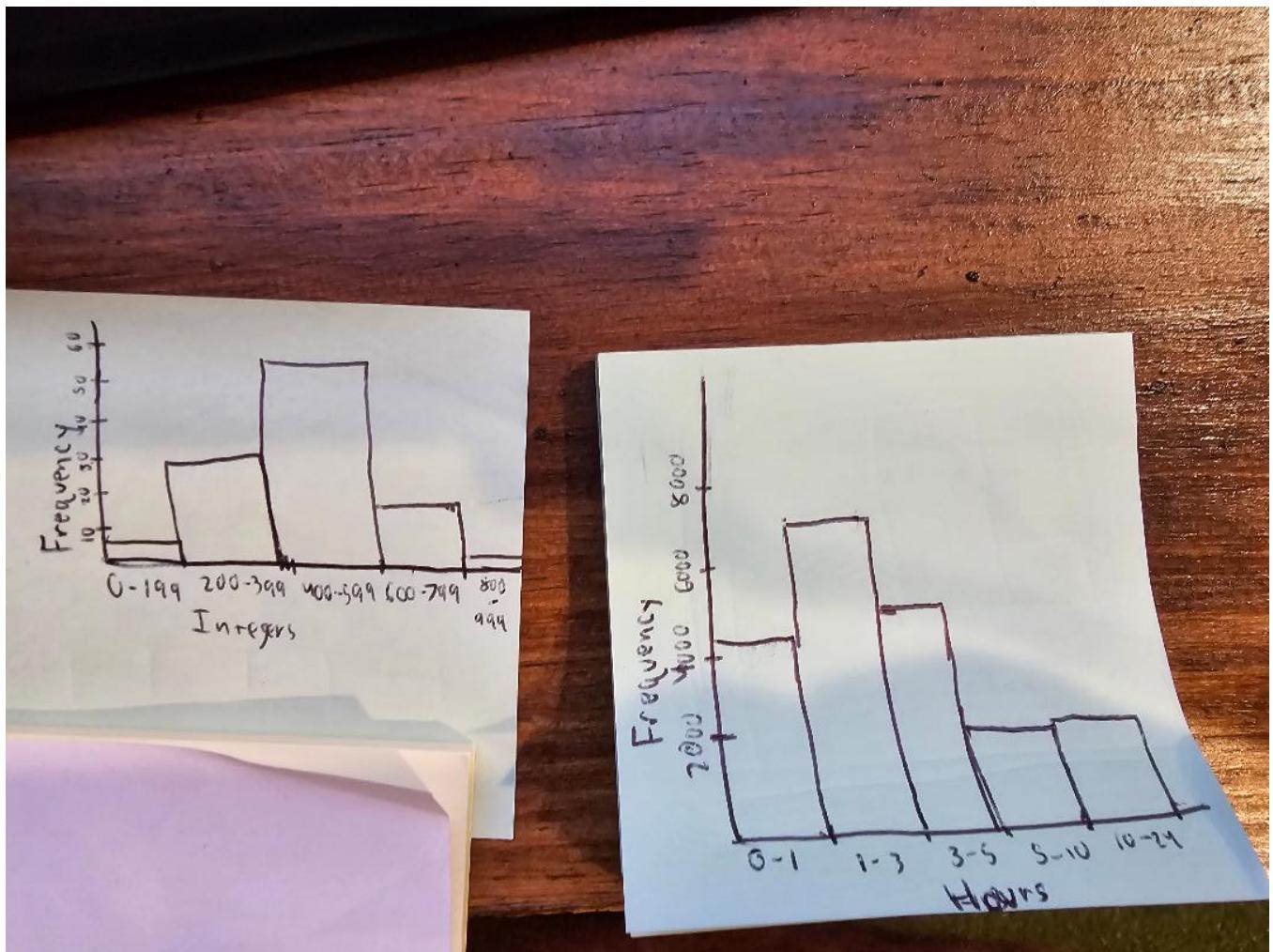
O



[Erik Gonzalez](https://iu.instructure.com/courses/2165942/users/6352173) (<https://iu.instructure.com/courses/2165942/users/6352173>)

Tuesday

⋮



Although I noticed the differences in the ranges for the second histogram, I was concerned that stretching the axis to represent the range of time might give an incorrect assumption of what the histogram represents. Doing so seems to imply that the area of the bar represents total time spent (frequency times hours, but that's not quite true, given that in that case each bare would have to encompass all the prior bins, as these are cumulative.

Edited by [Erik Gonzalez](https://iu.instructure.com/courses/2165942/users/6352173) (<https://iu.instructure.com/courses/2165942/users/6352173>) on Sep 19 at 10:35pm

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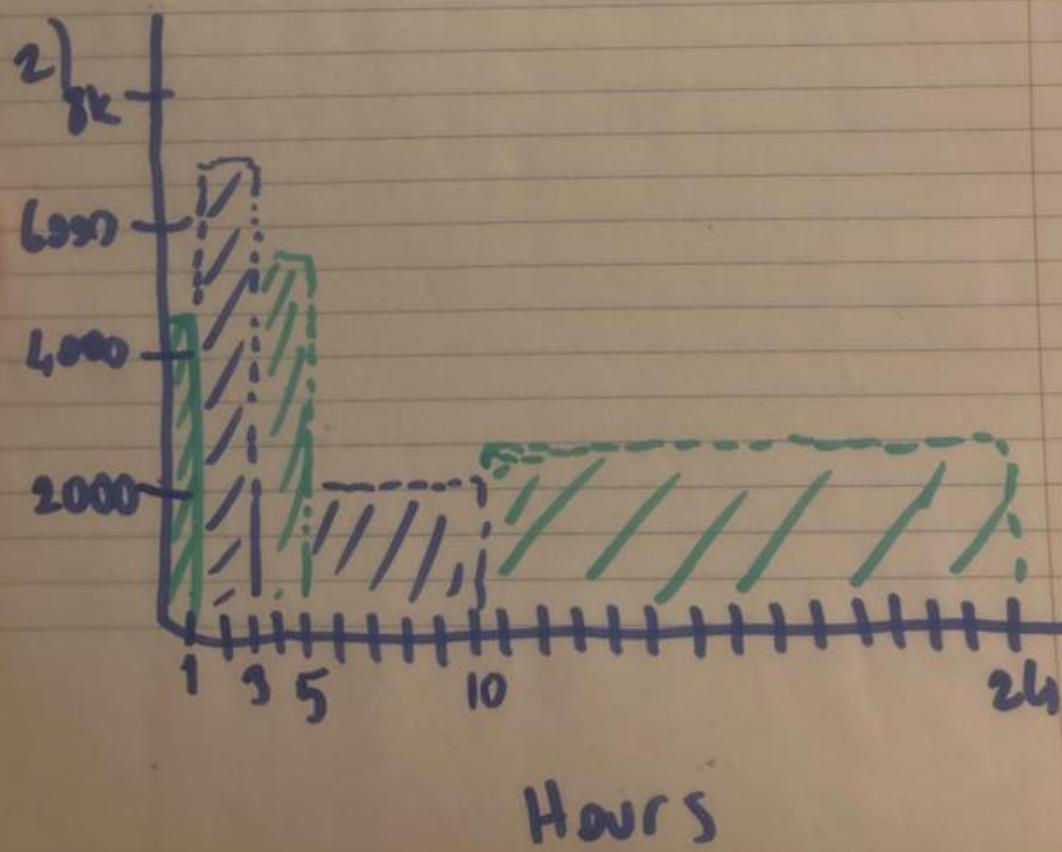
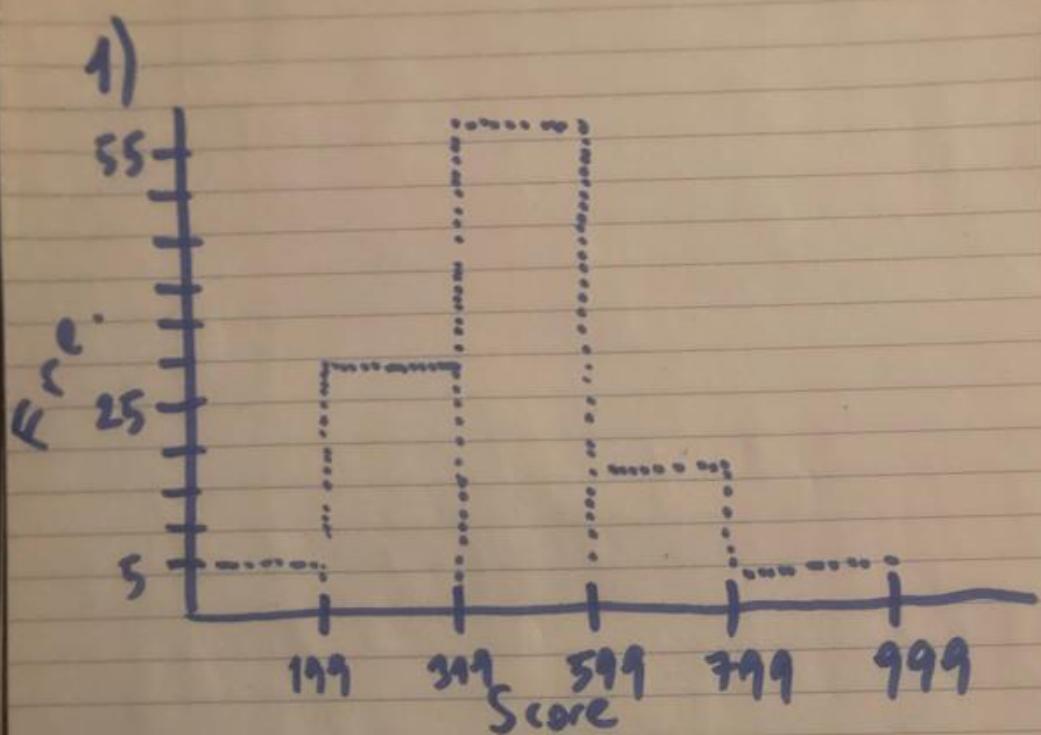


<https://>

[Onur Tekiner](https://iu.instructure.com/courses/2165942/users/6758180) (<https://iu.instructure.com/courses/2165942/users/6758180>)

Yesterday





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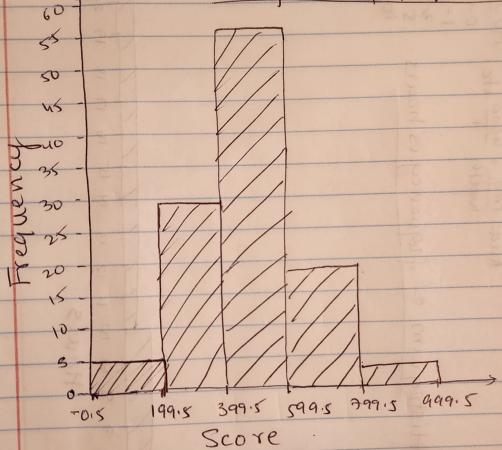
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<https://>Shruthi Senthilmani (<https://iu.instructure.com/courses/2165942/users/6688148>)

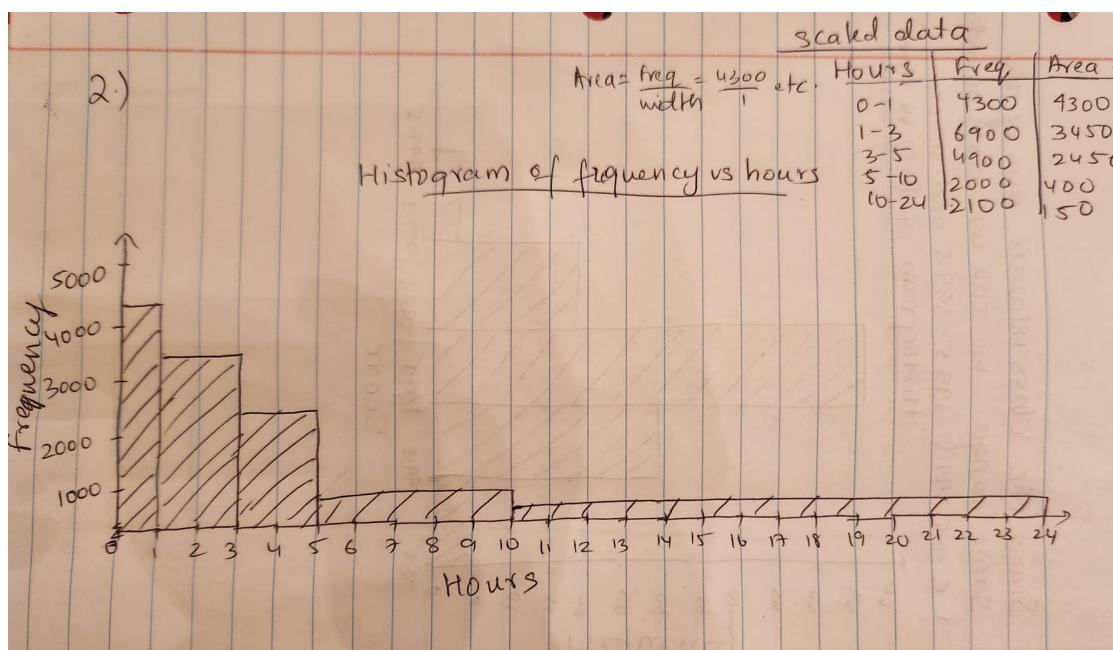
Yesterday

- 1) Since the class intervals are of the same range , we can use class boundaries i.e -0.5-199.5, 199.5-399.5 and so on.  
 Histogram of freq vs score.

1.



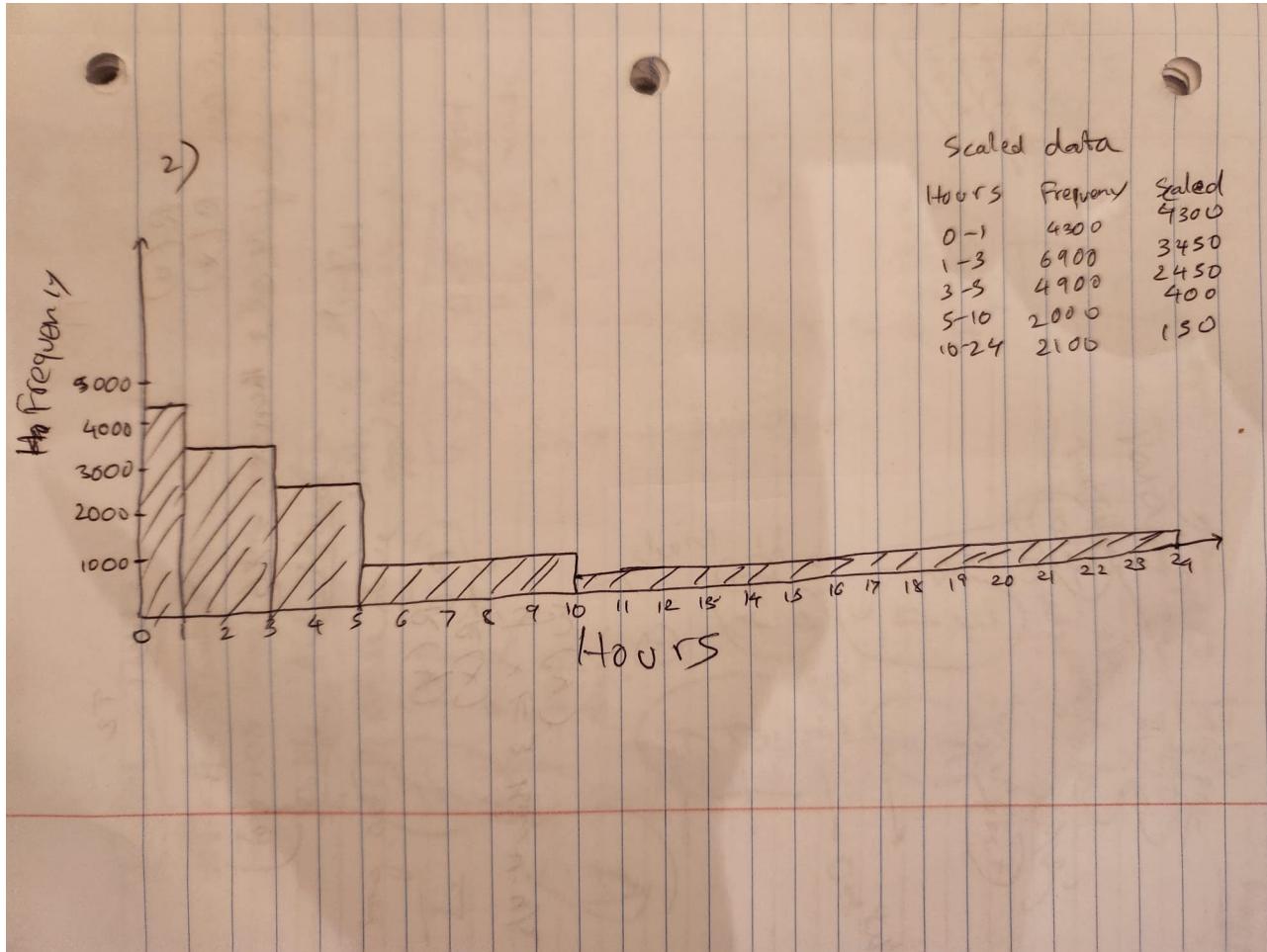
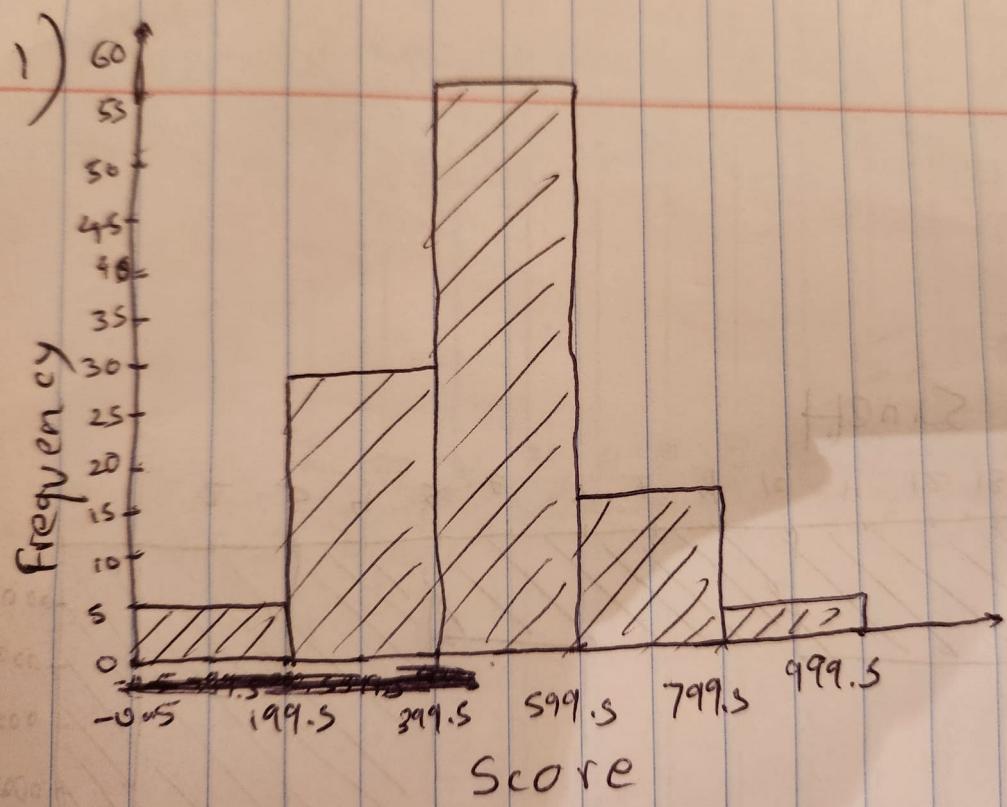
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<https://>Akash Patil (<https://iu.instructure.com/courses/2165942/users/6699404>)

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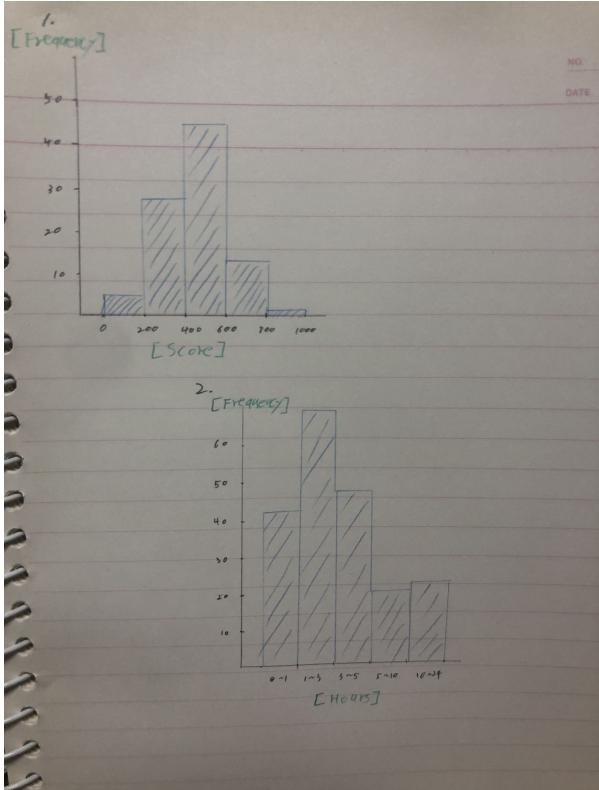


[Sangzun Park](https://iu.instructure.com/courses/2165942/users/6703376)

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...

This is the histogram I drew. The unit of the y-axis of the second histogram is 100.



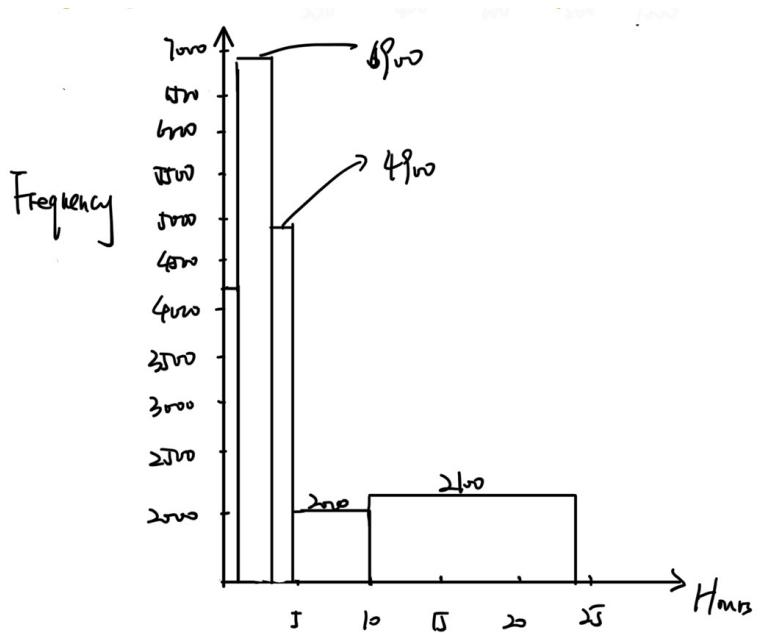
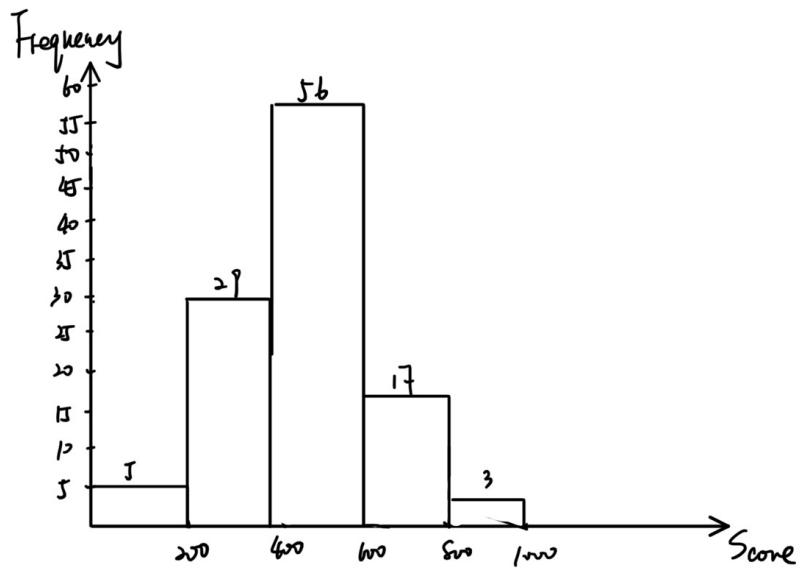
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[Ao Zhang](https://iu.instructure.com/courses/2165942/users/6703098)

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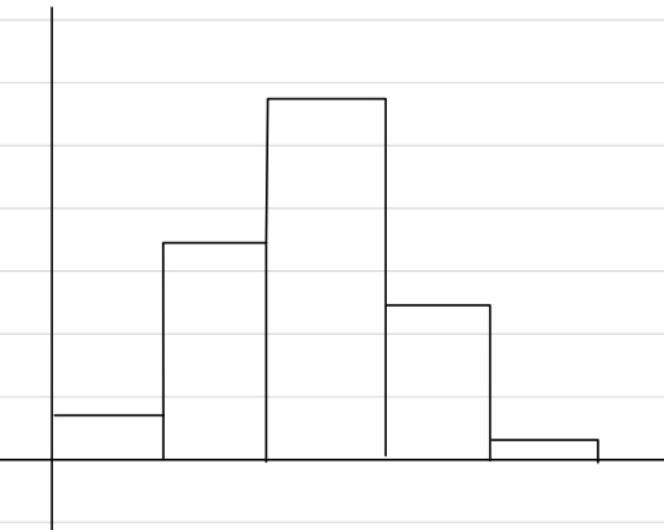
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[Andrea Chung](https://iu.instructure.com/courses/2165942/users/6443321)

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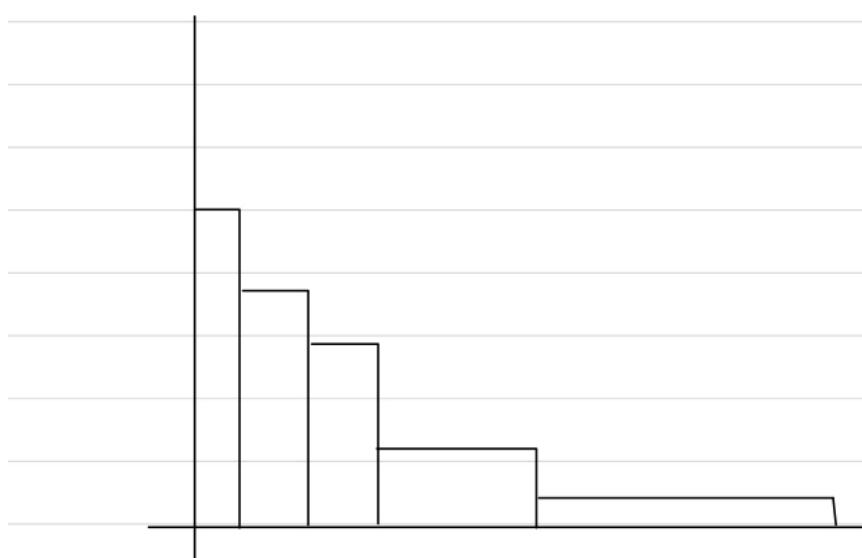
I thought that the the difficulty with histogram comes when the data range is split unequally. The frequency density needs to be calculated as the rectangles need to be proportional to frequencies of each class. Thus, the highest height of the rectangle would be with the first class.



(A)

Freq-density:

	1	2	2	5	14	$\frac{\text{Frequency}}{\text{Class width}}$
	4300	3450	2450	400	150	



Edited by [Andrea Chung](https://iu.instructure.com/courses/2165942/users/6443321) (<https://iu.instructure.com/courses/2165942/users/6443321>) on Sep 22 at 5:48pm

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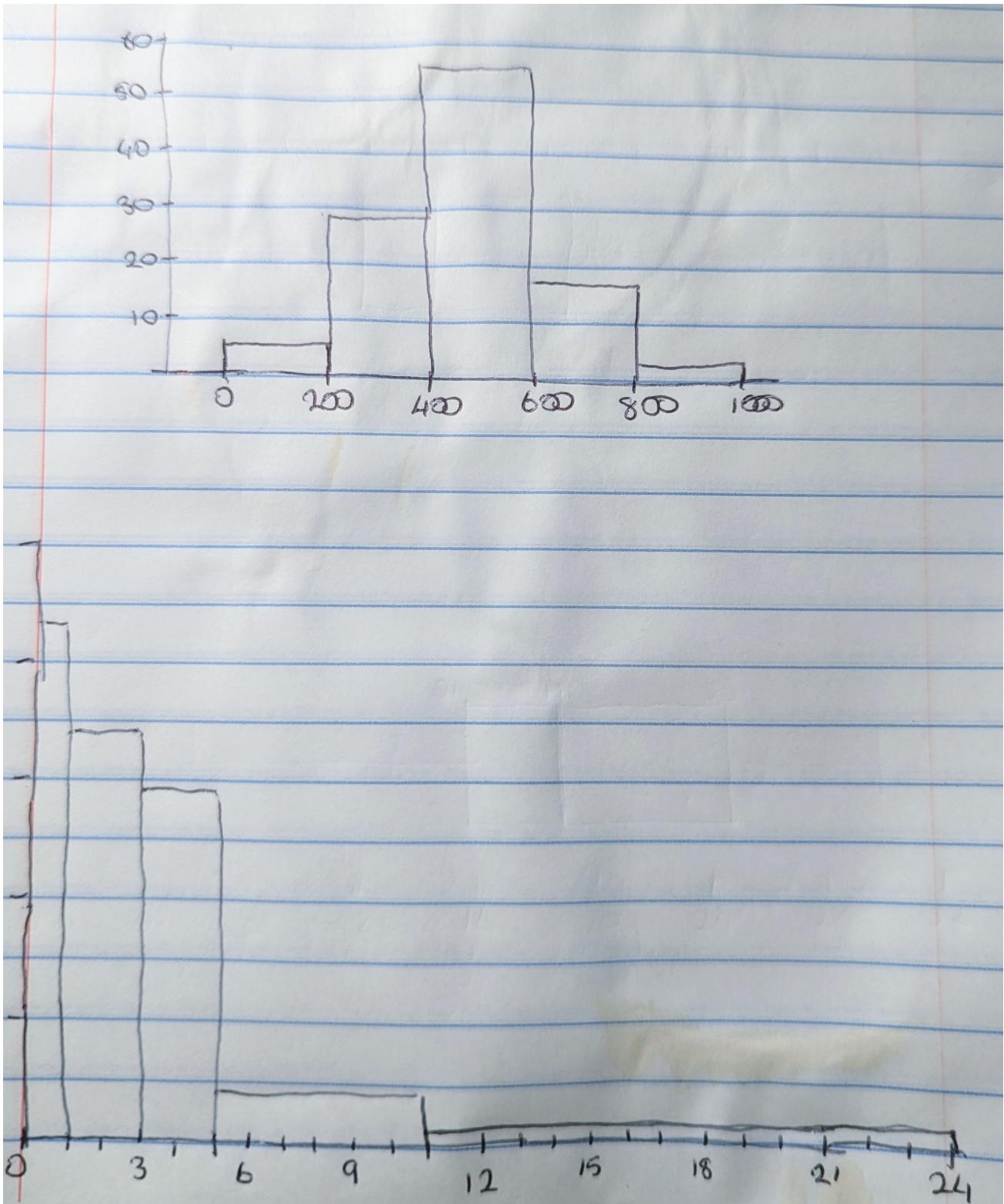
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Gary Croke (<https://iu.instructure.com/courses/2165942/users/6706306>)

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Yesterday



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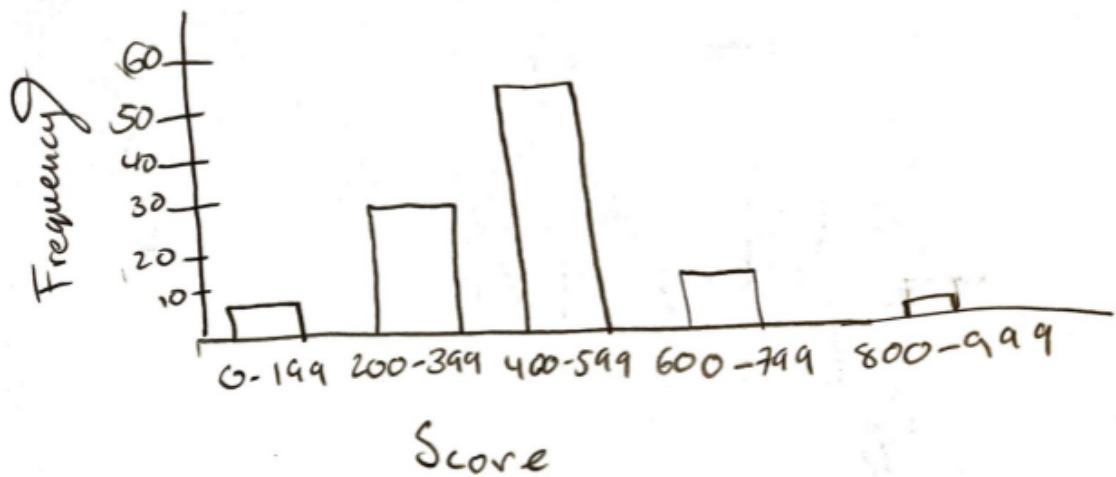
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Simon Driver (<https://iu.instructure.com/courses/2165942/users/6818242>)

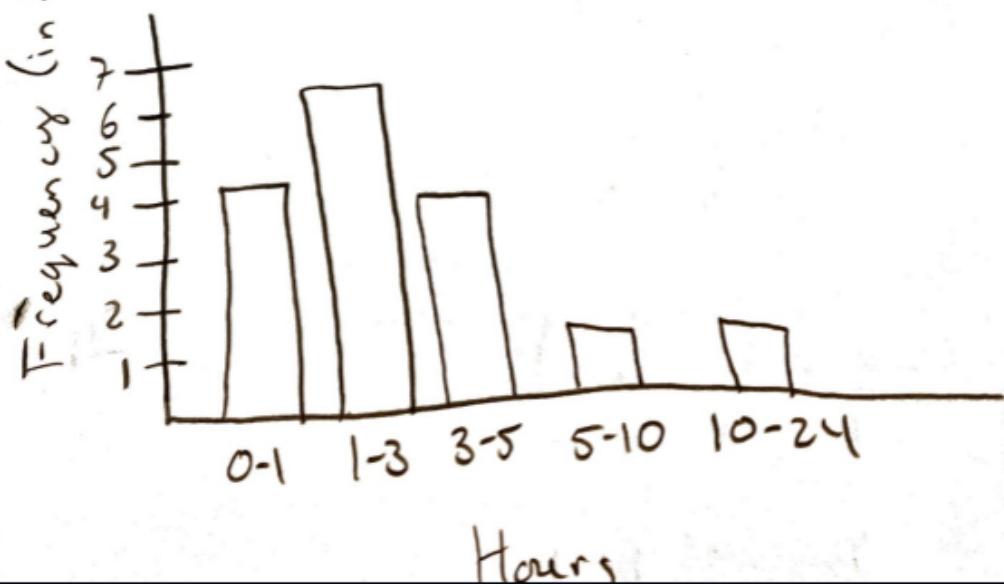
1:25pm

⋮

Histogram 1



Histogram 2



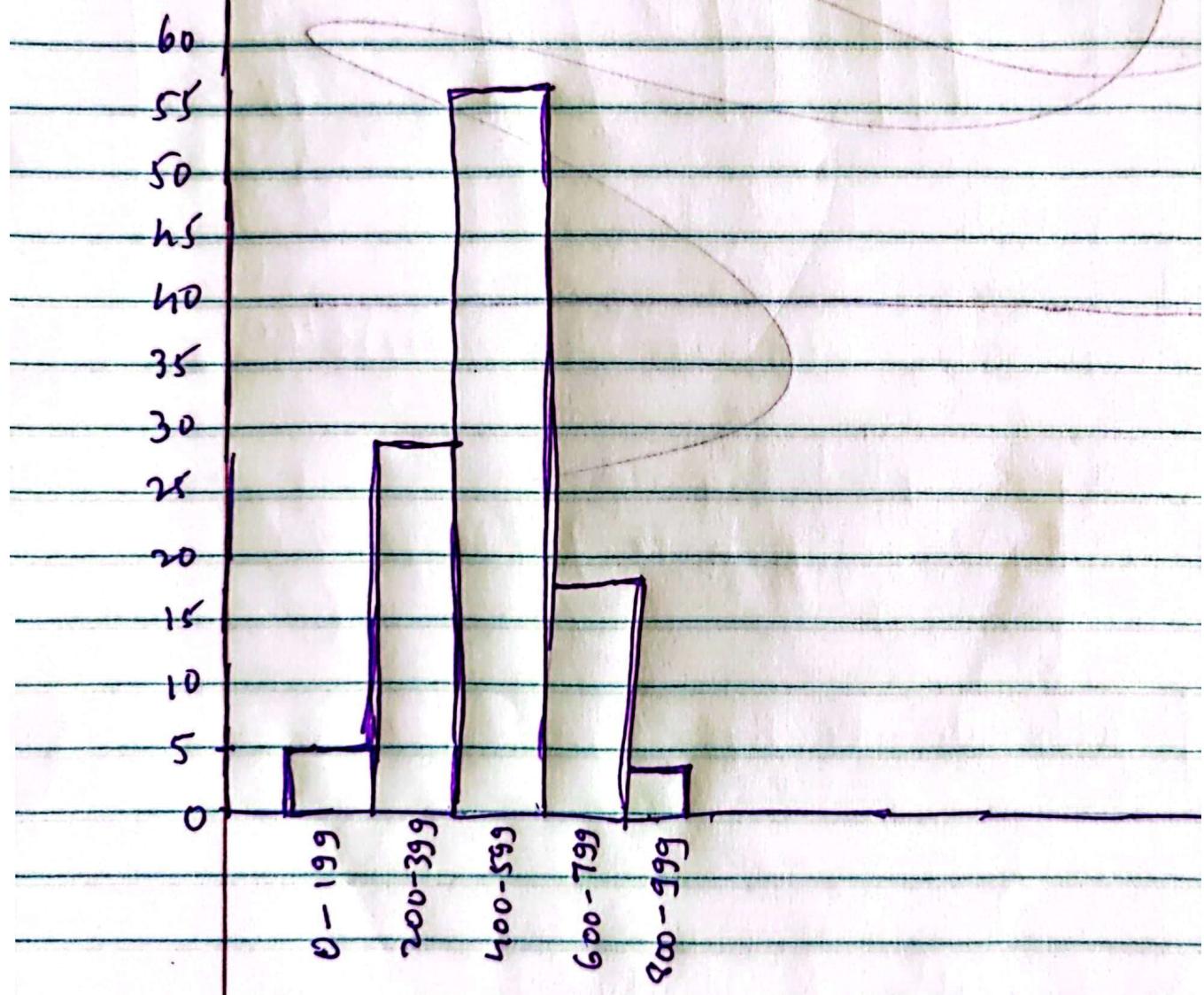
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Mukul Gharpure (<https://iu.instructure.com/courses/2165942/users/6678592>)

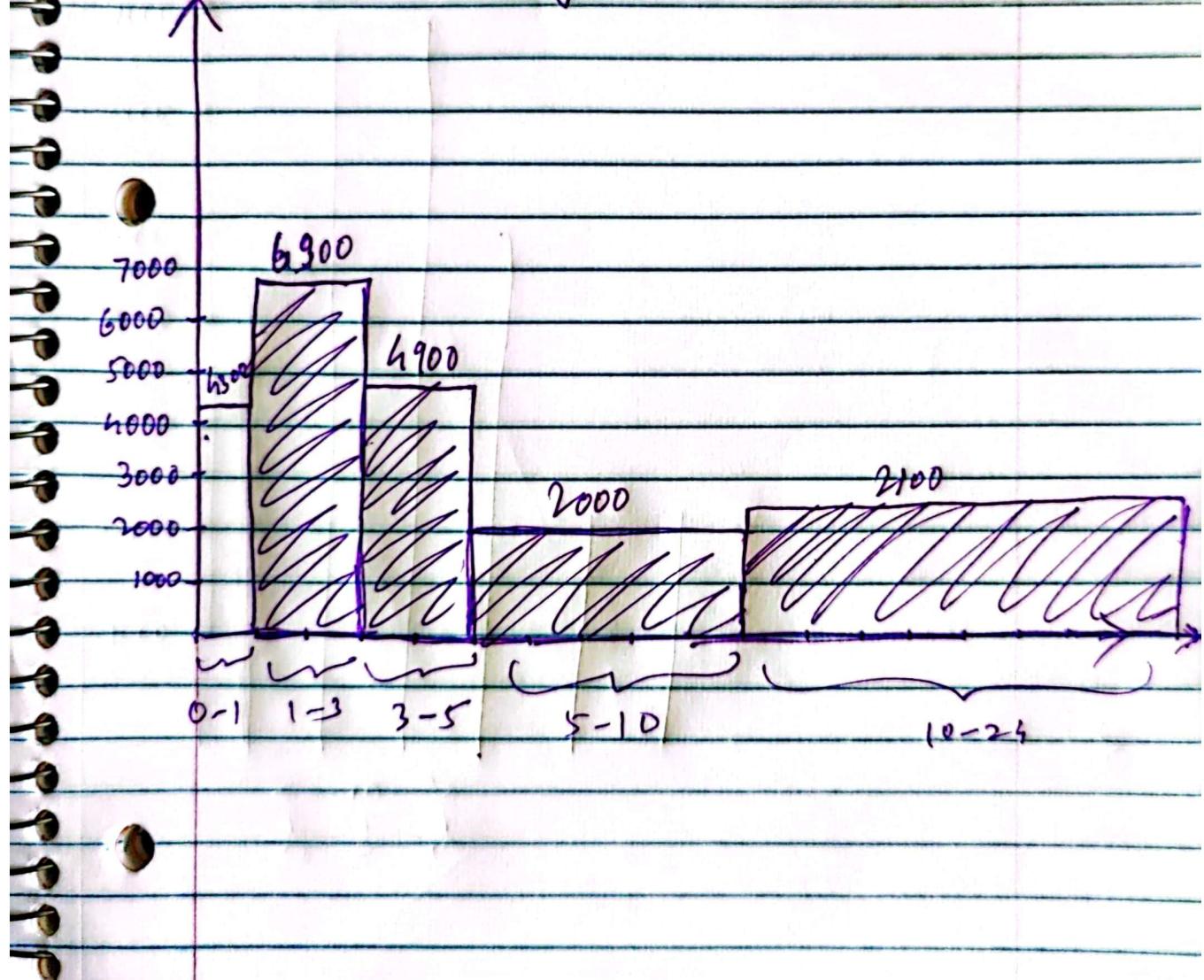
2:36pm

# 1<sup>st</sup> Histogram Importance



 Scanned with CamScanner

## 2<sup>nd</sup> Histogram



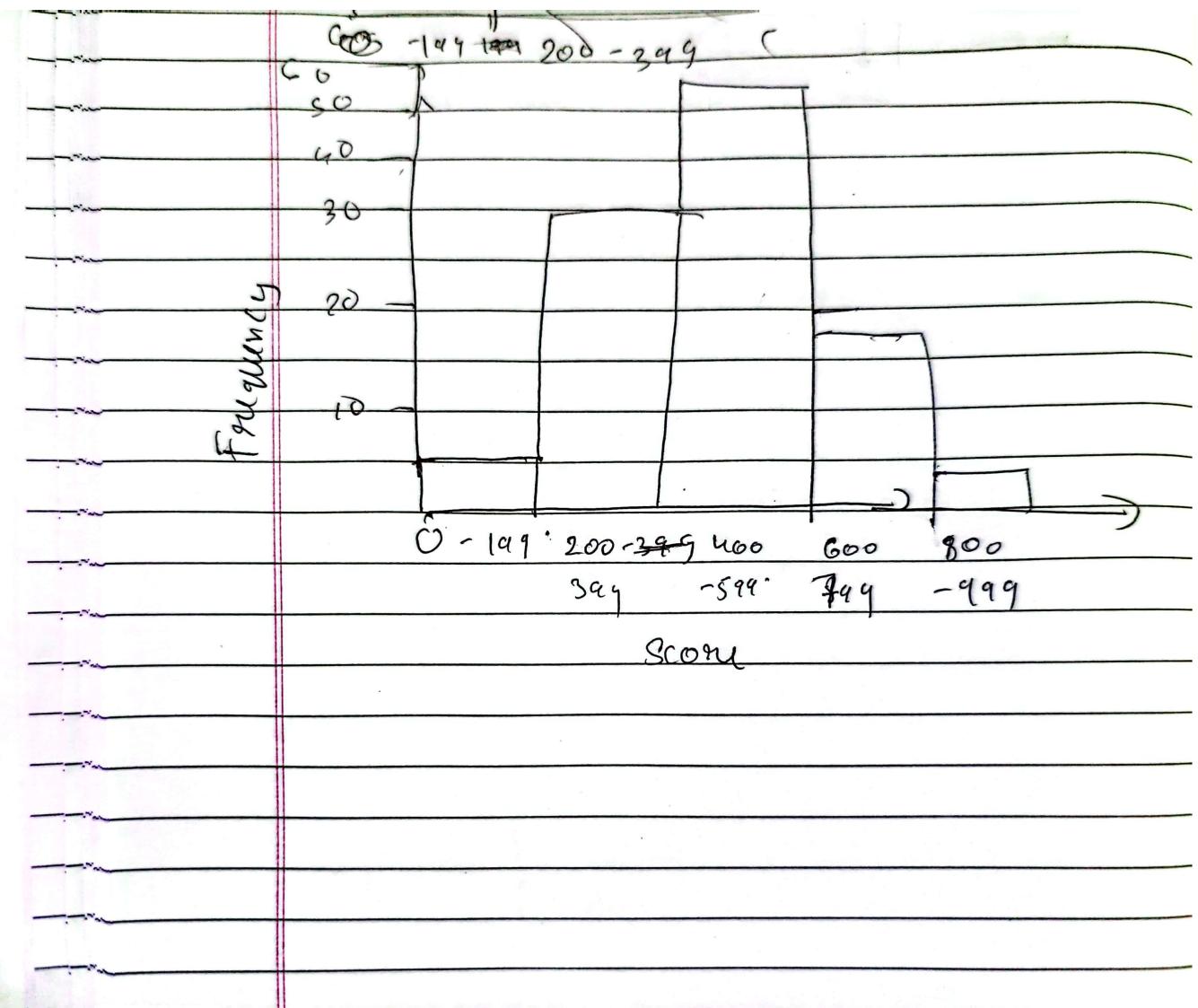
O

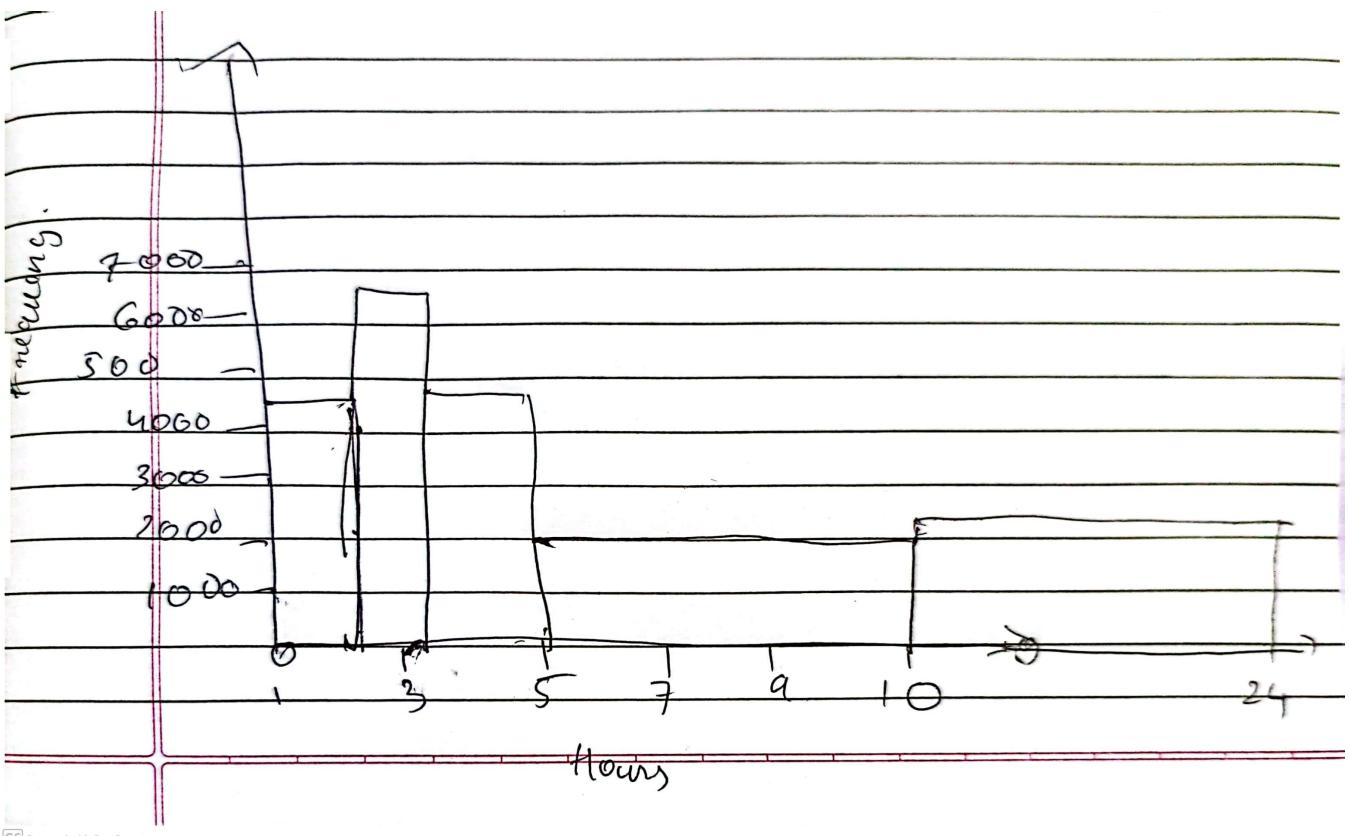


**Shreedeep Sadasivan Nair (he/him/his)** (<https://iu.instructure.com/courses/2165942/users/6813278>)

3:00pm

⋮





CS Scanned with CamScanner

the histograms are"

Edited by [Shreedeep Sadasivan Nair](https://iu.instructure.com/courses/2165942/users/6813278) (<https://iu.instructure.com/courses/2165942/users/6813278>) on Sep 23 at 3:10pm

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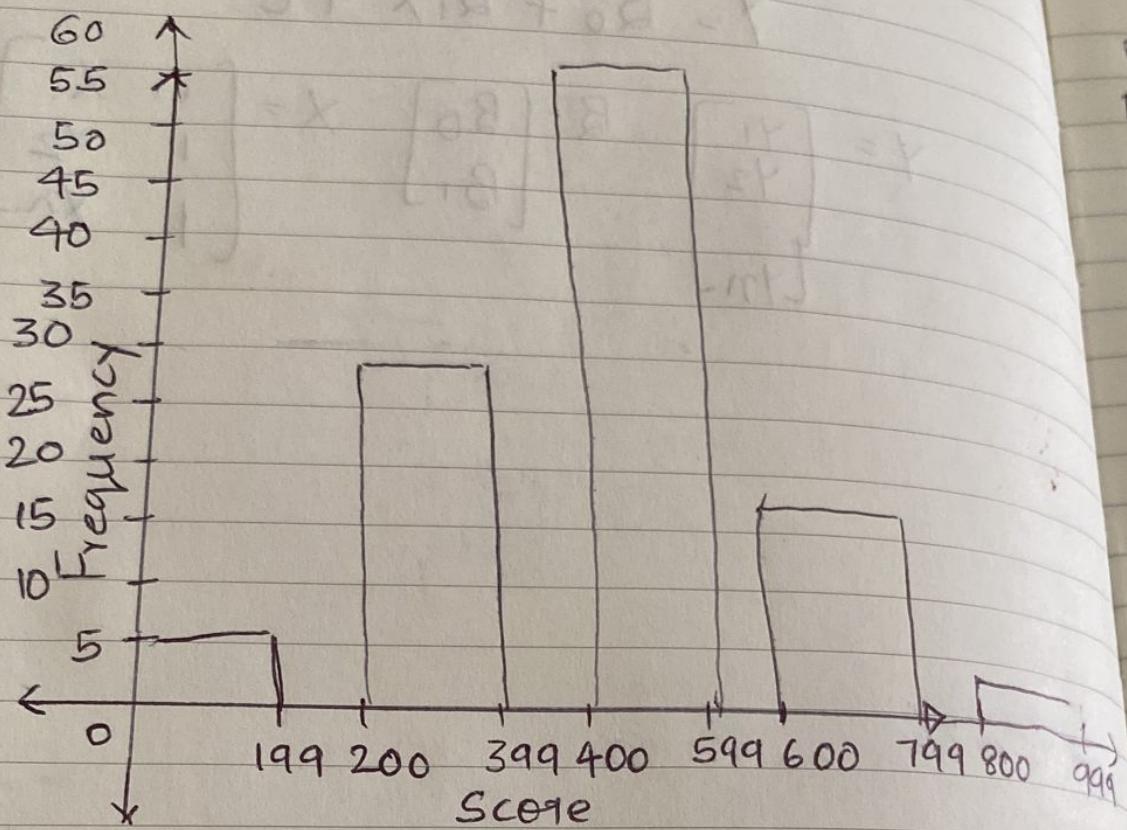


[Jash Shah](https://iu.instructure.com/courses/2165942/users/6684840) (<https://iu.instructure.com/courses/2165942/users/6684840>)

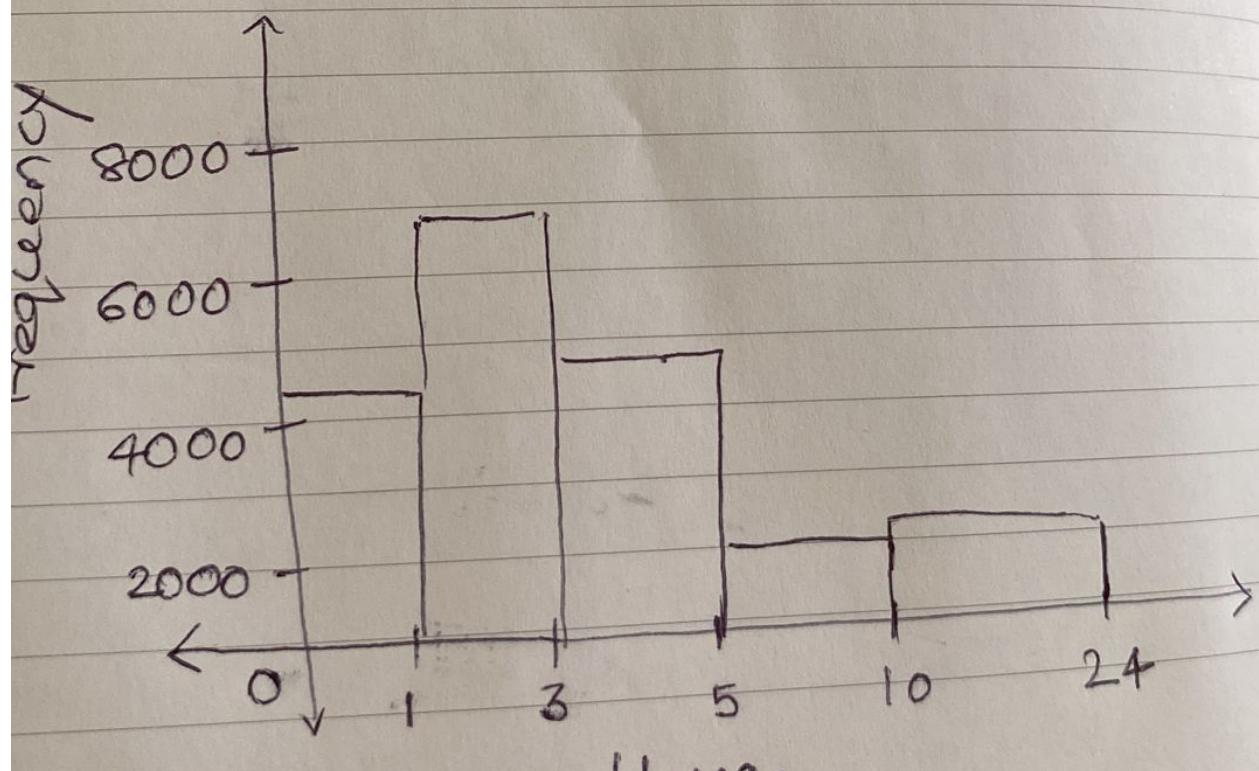
4:23pm

Look at the below image

### Histogram 1



### Histogram 2



Data  
Min =  
Q1 =  
Medi  
Q3  
Max  
IQR



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O



[Robert Perez \(he/him/his\) \(https://iu.instructure.com/courses/2165942/users/6701521\)](https://iu.instructure.com/courses/2165942/users/6701521)

5:17pm

⋮

Table 1:

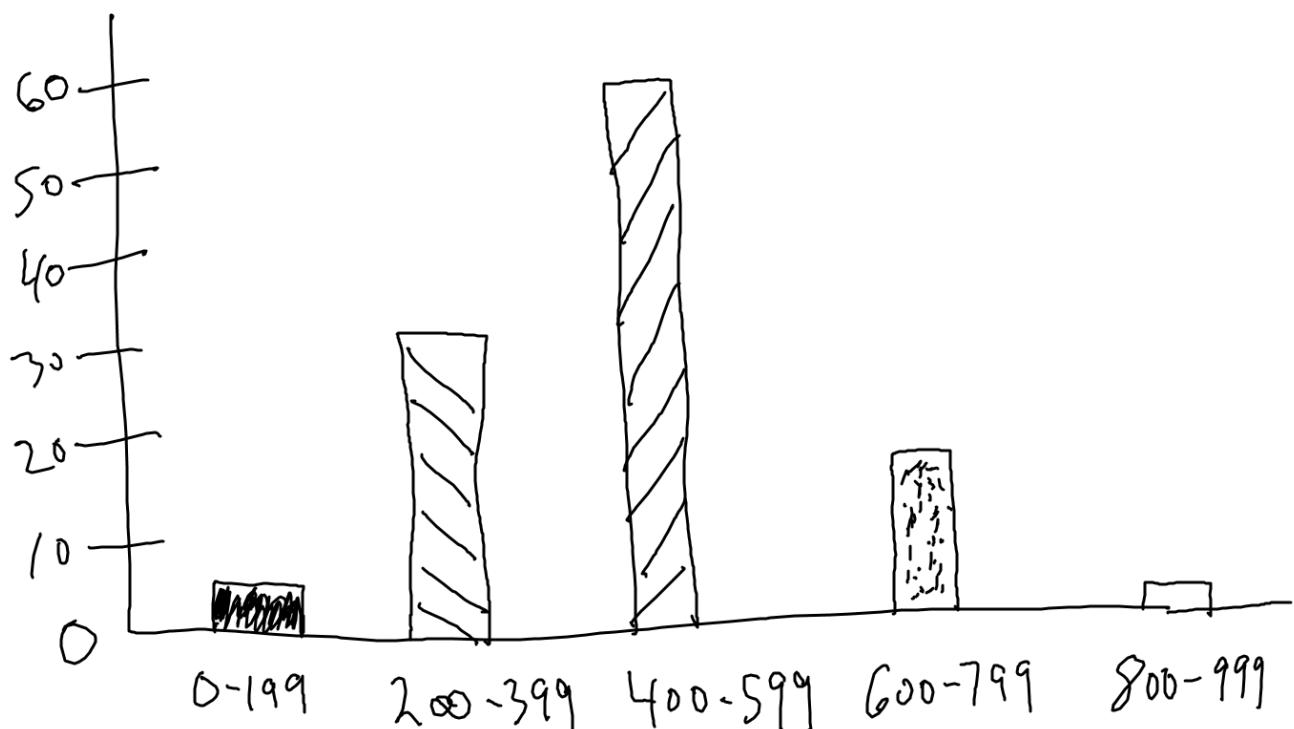
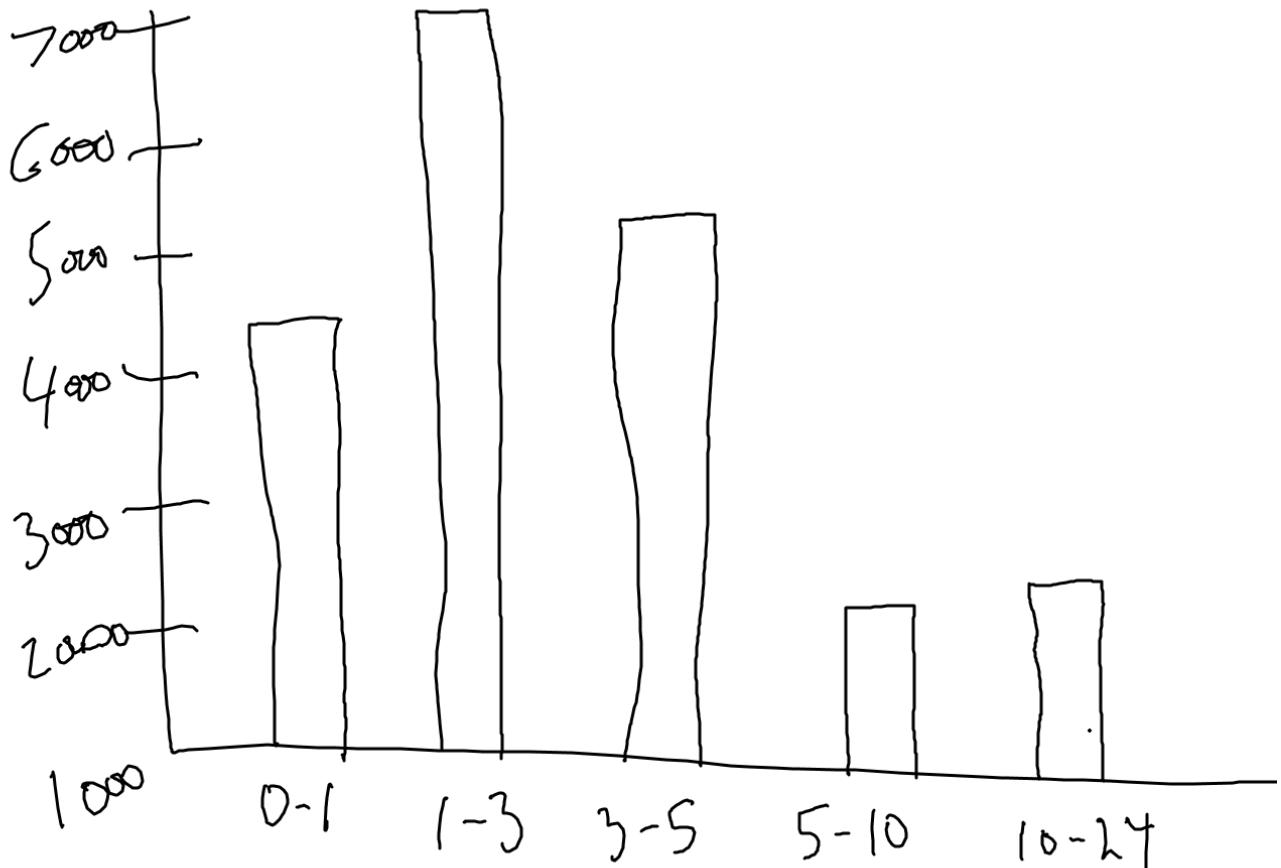


Table 2:



I admit I'm not much of an artist.

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[Robert Perez \(he/him/his\)](#) (<https://iu.instructure.com/courses/2165942/users/6701521>)

5:20pm

Having watched the video, I now realize I created a bar chart, not a histogram. :-(

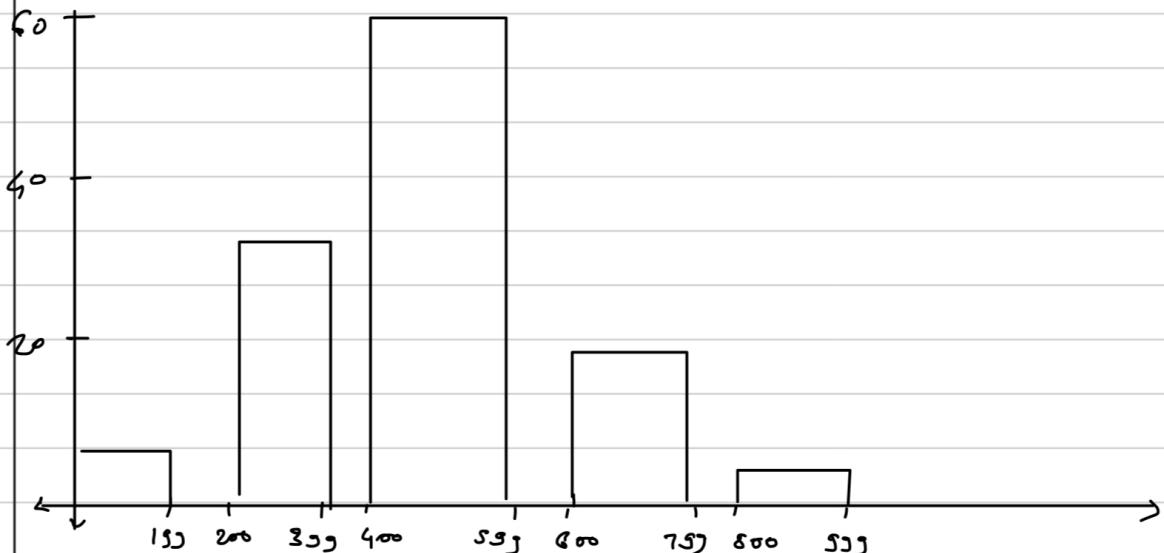
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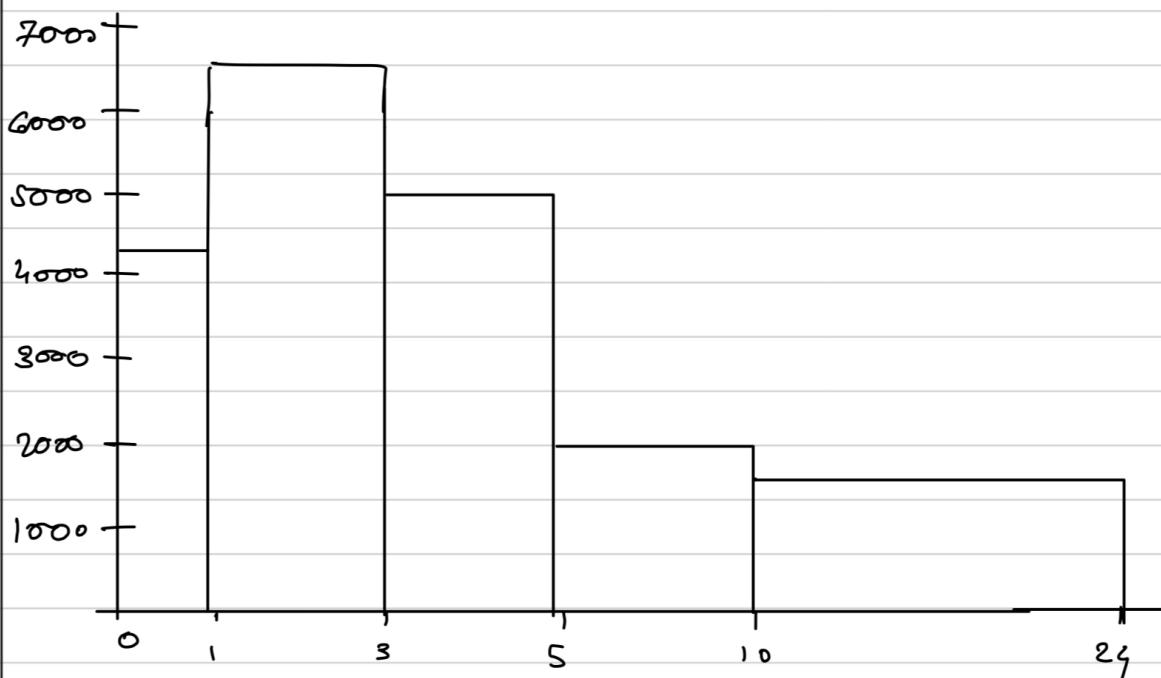
[Aditya Sanjay Mhaske](#) (<https://iu.instructure.com/courses/2165942/users/6692144>)

5:46pm

Histogram 1



Histogram 2



Edited by [Aditya Sanjay Mhaske](https://iu.instructure.com/courses/2165942/users/6692144) (<https://iu.instructure.com/courses/2165942/users/6692144>) on Sep 23 at 5:56pm

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