

PLOT THE DOTS

Introduction

A Dot Plot is a statistical representation consisting of data points plotted on a fairly simple scale, typically using filled in circles.

The Dot Plot is a representation of a distribution consists of group of data points plotted on a simple scale.

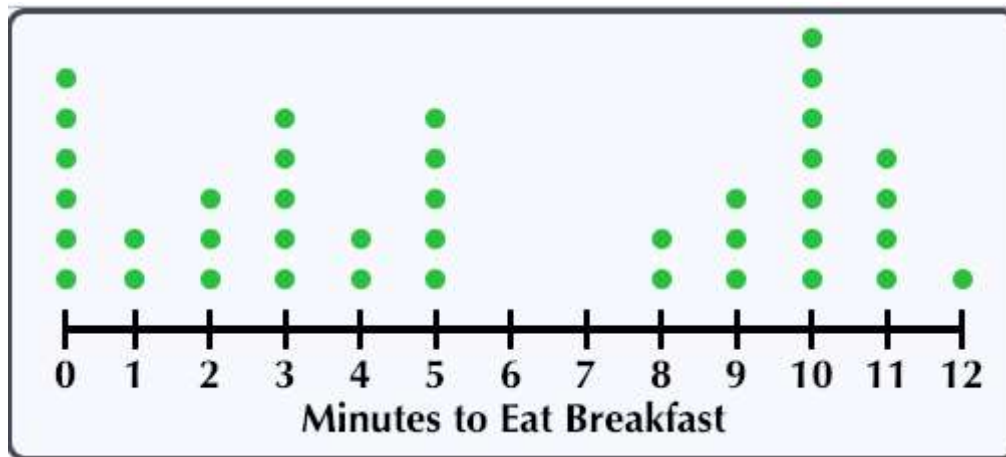
Example : Minutes To Eat Breakfast

The result of the survey "How long does it take to eat breakfast?" is as follows:-

Minutes:	0	1	2	3	4	5	6	7	8	9	10	11	12
People:	6	2	3	5	2	5	0	0	2	3	7	4	1

Which means that 6 people took 0 minutes to ate breakfast (they probably had no breakfast), 2 people said they only spent 1 minute to ate breakfast and rest of the data given for the other people.

Dot Plot visual representation:



Goal

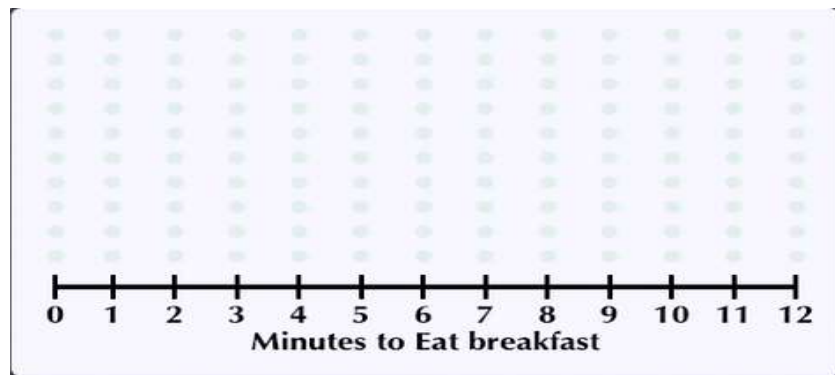
Your task is to implement the above Dot Plot module in two modes, namely-

- a) "No" user interaction

In this mode the Dot Plot will be drawn based on the values of global variables given below.

- b) "On" user interaction

In this mode the number line, divisions, axis name are created based on the values of global variables given below **but the green dots should be plotted upto the user clicks on that division.** Example shown in the picture here-



Global variables needs to be taken

1. mode= 1

Mode can have the values 1 or 2. Passing this should display that specific module only.

2. divisions=0|1|2|3|4|5|6|7|8|9|10|11|12

Use this variable to create number line. Value of divisions are separated by "|", these divisions should be present on the number line and has to be separated equally.

3. answerDots=6|2|3|5|2|5|0|0|2|10|7|4|1

Value of answerDots is the correct value that comes on Dot Plot for each division.

4. axisName ="Minutes to eat breakfast"

This text should display below the number line as shown in the picture.

Few development notes needs to be taken care of

1. Code must be well documented and well indented.
2. Do not hardcode. Ensure your code is flexible and adaptable to different use cases.
3. You can use HTML5 canvas Javascript/Jquery/CSS for development. Additional SDK's or libraries used must be explained.
4. Ensure you perform the unit level testing of your code and build, to have no blockers while being reviewed at our end.
5. Browser support : Minimum requirement is Chrome.

We Wish You All The Best