

- a. One of the variables is date or time: I'd go for a line graph to see trends over time, like how my mood changes throughout the week or how my study hours vary over months.
- b. Both the variables are numerical: Scatter plot all the way! It's perfect for seeing if there's any relationship between two numerical things, like how my sleep hours affect my test scores.
- c. To study the correlation between two variables: Scatter plot again, but this time, I'd pay close attention to how tight the points are clustered around a line. If they're bunched up, it means strong correlation
- d. To study the distribution of a continuous variable using discrete bins: Histogram sounds cool. It's like sorting my data into little bins and counting how many fall into each one. Helps me see if there are any patterns or spikes.
- e. To study the distribution of a continuous variable without using discrete bins: I'd try a smooth line chart using Kernel Density Estimation. It's like connecting the dots but in a smooth, curvy way. It gives a nice overview of where the data is concentrated.
- f. To identify outliers: Box plot is my go-to. It's like drawing a box around most of my data and showing me where the outliers hang out. Super handy for spotting those weird data points!
- g. To study the distribution of a discrete variable: Gotta be a bar chart or a pie chart. Simple. It's like visualising how many times each category pops up in my data.
- h. To study the density of overlap or concurrence of two variables: I'd go for a heatmap. It's like coloring in squares to show where the action is happening. It helps me see where things overlap or coincide.
- i. To study the spread of values in a continuous variable: Definitely a box plot or a violin plot. They're like showing off the range of my data in a cool, visual way. Helps me see if my data is all over the place or nicely concentrated.