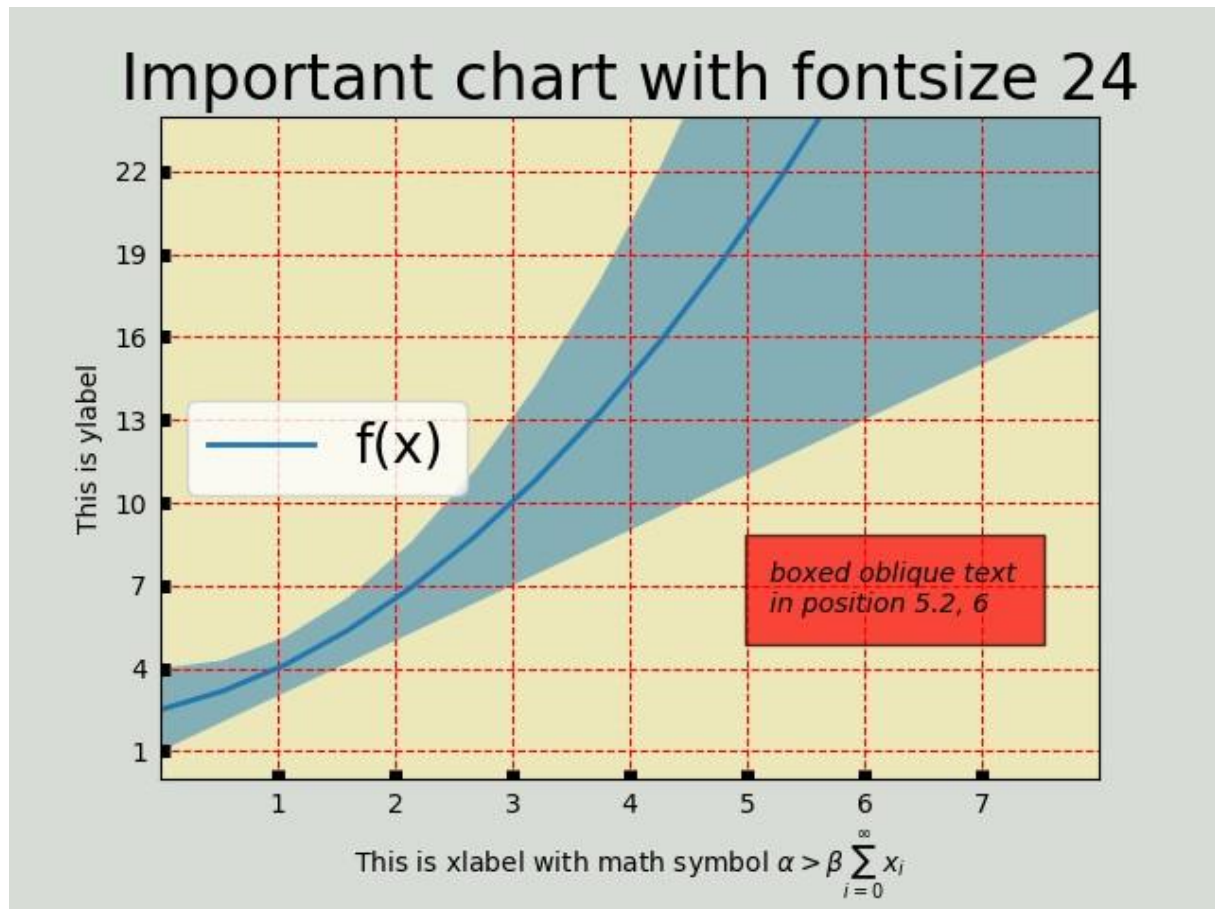# List 1 – matplotlib basics

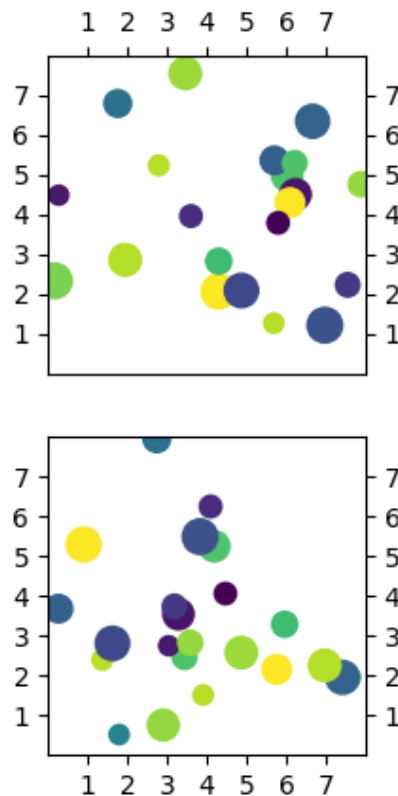**If you will not finish during the classes, finish at home before next classes.**

- **Using matplotlib library try to recreate this chart**

- Top line of blue area is given by formula $y = 4 + x^2$
- Bottom line of blue area is given by formula $y = 1 + 2 * x$
- Solid blue line is average of these two
- Ticks have width equal to 5

- **Using matplotlib library try to recreate this chart**

- You should randomly plot 24 points in the area (0,8) x (0,8) with random sizes (between 50 and 200) and color
- To randomize location you can use **np.random.normal()**
- To randomize size and color you can use **np.random.uniform()**
- Check have ticks are looking like on the picture
- Both charts are squares – set them like that in code, don't adjust after plotting