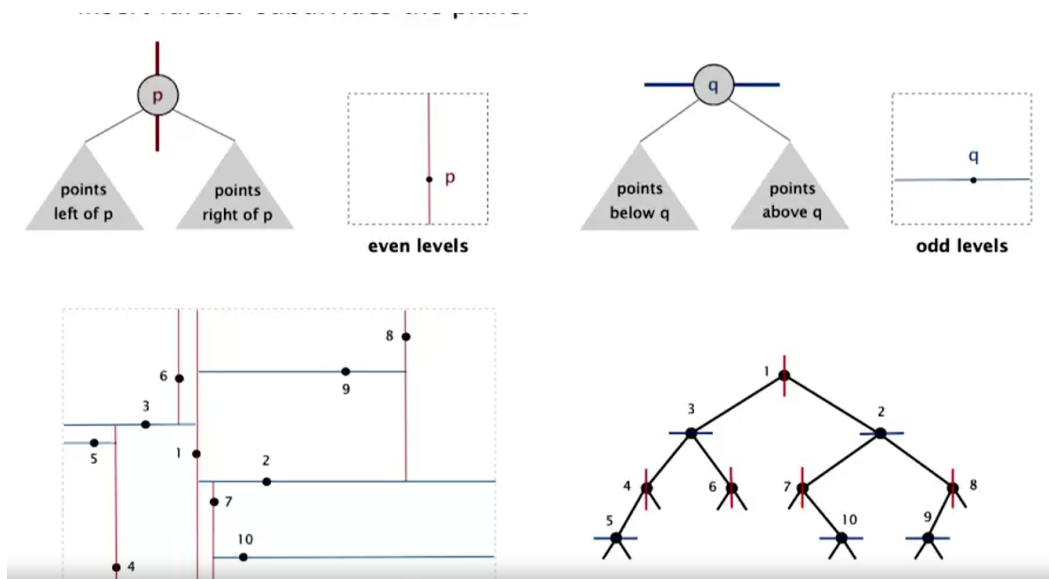# 【DS】Day20

☰ Tags	
📅 Date	@June 17, 2022
☰ Summary	Kd-Trees

【Week 5】Geometric Applications of BST

5.1 Kd-Trees

Data Structure: BST, but alternate using x- and y-coordinates as key

- Search gives rectangle containing point

- Insert further subdivides the plane

Goal: Find all points in a query axis-aligned rectangle:

- Check if point in node lies in given rectangle

- Recursively search left/bottom or top/right