

DBSCAN: Density-Reachable and Density-Connected

□ Directly density-reachable:

- A point p is **directly density-reachable** from a point q w.r.t. Eps (ϵ), $MinPts$ if
 - p belongs to $N_{Eps}(q)$
 - **core point** condition: $|N_{Eps}(q)| \geq MinPts$

□ Density-reachable:

- A point p is **density-reachable** from a point q w.r.t. Eps , $MinPts$ if there is a chain of points p_1, \dots, p_n , $p_1 = q$, $p_n = p$ such that p_{i+1} is directly density-reachable from p_i

□ Density-connected:

- A point p is **density-connected** to a point q w.r.t. Eps , $MinPts$ if there is a point o such that both p and q are density-reachable from o w.r.t. Eps and $MinPts$

