

- Project (pro, name, head, budget, city)

$$\hookrightarrow P1 = \sigma_{\text{budget} < 100000} (\text{Project})$$

$$\hookrightarrow P2 = \sigma_{100000 \leq \text{budget} \leq 500000} (\text{Project})$$

$$\hookrightarrow P3 = \sigma_{\text{budget} > 500000} (\text{Project})$$

- Query: `SELECT * FROM PROJECT WHERE budget > 90000 and budget < 200000`

$$Q := \sigma_{90000 < B < 200000} (P)$$

- Query escrita en termes de fragments (data allocation):

$$Q' := \sigma_{90000 < B < 200000} (P1 \cup P2 \cup P3)$$

- Reduction phase:

$$Q' := \sigma_{90000 < B < 200000} (P1) \cup \sigma_{90000 < B < 200000} (P2) \cup \sigma_{90000 < B < 200000} (P3)$$

$$Q' := \sigma_{90000 < B < 200000} (\sigma_{B < 100000} (P1)) \cup \sigma_{90000 < B < 200000} (\sigma_{100000 \leq B \leq 500000} (P2)) \cup \sigma_{90000 < B < 200000} (\sigma_{B > 500000} (P3))$$

$$Q' := \sigma_{90000 < B < 100000} (P1) \cup \sigma_{100000 \leq B < 200000} (P2)$$

$$Q' := \sigma_{90000 < B < 100000} (P1) \cup \sigma_{100000 \leq B < 200000} (P2)$$