

CMSC 23500: Introduction to Databases

Homework 4
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Let f represent flights and a represent airports.

1. Let $A1 = \pi_{dst}(\sigma_{src="XYZ"}(f))$

Then the answer is $N1 = \pi_{name}(a \bowtie (\rho_{dst \rightarrow airportCode} A1))$

2. Let $A2 = \pi_{dst}(f \bowtie (\rho_{dst \rightarrow src}(A1)))$

Then the answer is $N2 = \pi_{name}(a \bowtie (\rho_{dst \rightarrow airportCode} A2))$

3. Let $A3 = \pi_{dst}(f \bowtie (\rho_{dst \rightarrow src}(A2)))$

Then the answer is $N3 = \pi_{name}(a \bowtie (\rho_{dst \rightarrow airportCode} A3))$

4. $N1 \cup N2 \cup N3$