

$$i. \pi_{eid}(\sigma_{aname='Boeing'}(Aircraft) \bowtie Certified)$$

$$ii. \pi_{ename}(\pi_{eid}(\pi_{aid}(\sigma_{aname='Boeing'}(Aircraft)) \bowtie Certified) \bowtie Employees)$$

$$iii. \rho_A((\sigma_{from='Bonn'}(Flights) \wedge (\sigma_{to='Madras'}(Flights)))$$

$$\rho_B(\pi_{distance}(A) \times Aircraft)$$

$$\pi_{aid}(\sigma_{distance \leq cruisingrange}(B))$$

$$iv. \rho_A((\pi_{cruisingrange}((\pi_{eid, aid}(\sigma_{salary > 100000}(Certified \bowtie Employees))) \bowtie Aircraft) \times Flights)$$

$$\pi_{fno}(\sigma_{cruisingrange \geq distance}(A))$$

$$v. \rho_A(\pi_{ename}((\pi_{eid}(\pi_{aid}(\sigma_{cruisingrange > 3000}(Aircraft)) \bowtie Certified) \bowtie Employees))$$

$$\rho_A(\pi_{ename}((\pi_{eid}(\pi_{aid}(\sigma_{aname='Boeing'}(Aircraft)) \bowtie Certified) \bowtie Employees))$$

$$\rho_C(\pi_{ename}(\pi_{eid}(Certified) \bowtie Employees))$$

$$(\rho_C - \rho_B) \wedge \rho_A$$

$$vi. \rho_A(Employees)$$

$$\rho_B(Employees)$$

$$\rho_C(\pi_{A.eid, A.ename, A.salary}(\sigma_{A.salary < B.salary}(A \times B)))$$

$$\pi_{eid}(A - C)$$

vii.