**(1)** 

 $\pi_{SNO}(\sigma_{JNO='J1'}(SPJ))$ 

**(2)** 

 $\pi_{SNO}(\sigma_{JNO='J1'\wedge PNO='P1'}(SPJ))$ 

(3)

 $\pi_{SNO}(\sigma_{JNO='J1' \land COLOR='\not \sqsubseteq \square'}(SPJ\bowtie P))$ 

**(4)** 

 $\pi_{JNO}(\sigma_{\neg(CITY='ar{}
abla^{'}\wedge COLOR='ar{}')}(Sowtiernooning SPJowtiernooning P))$ 

**(5)** 

 $\pi_{PNO,JNO}(SPJ) \div \pi_{PNO}(\sigma_{SNO='S1'}(SPJ))$