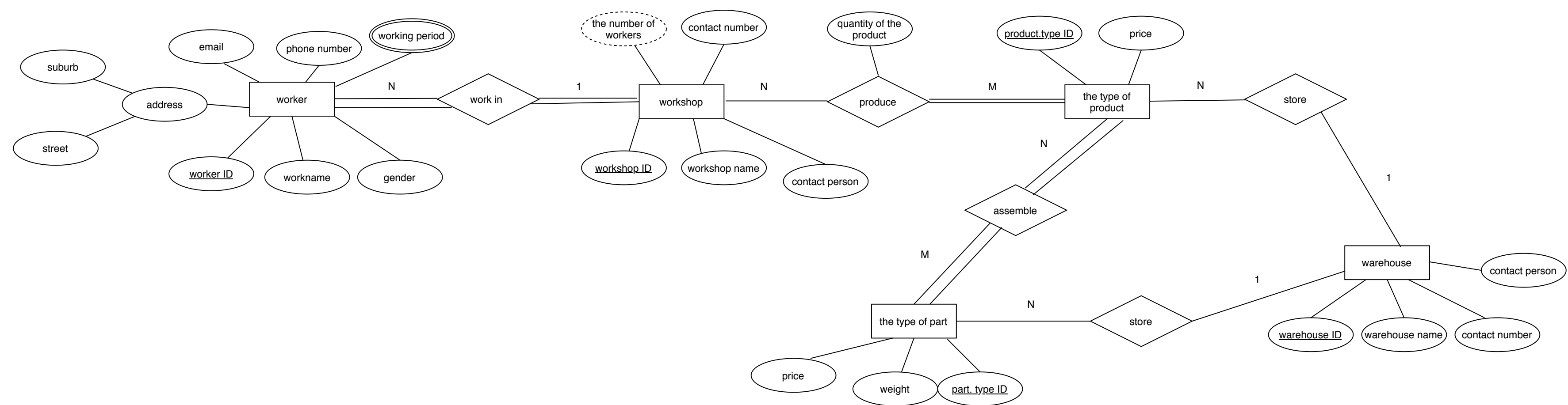
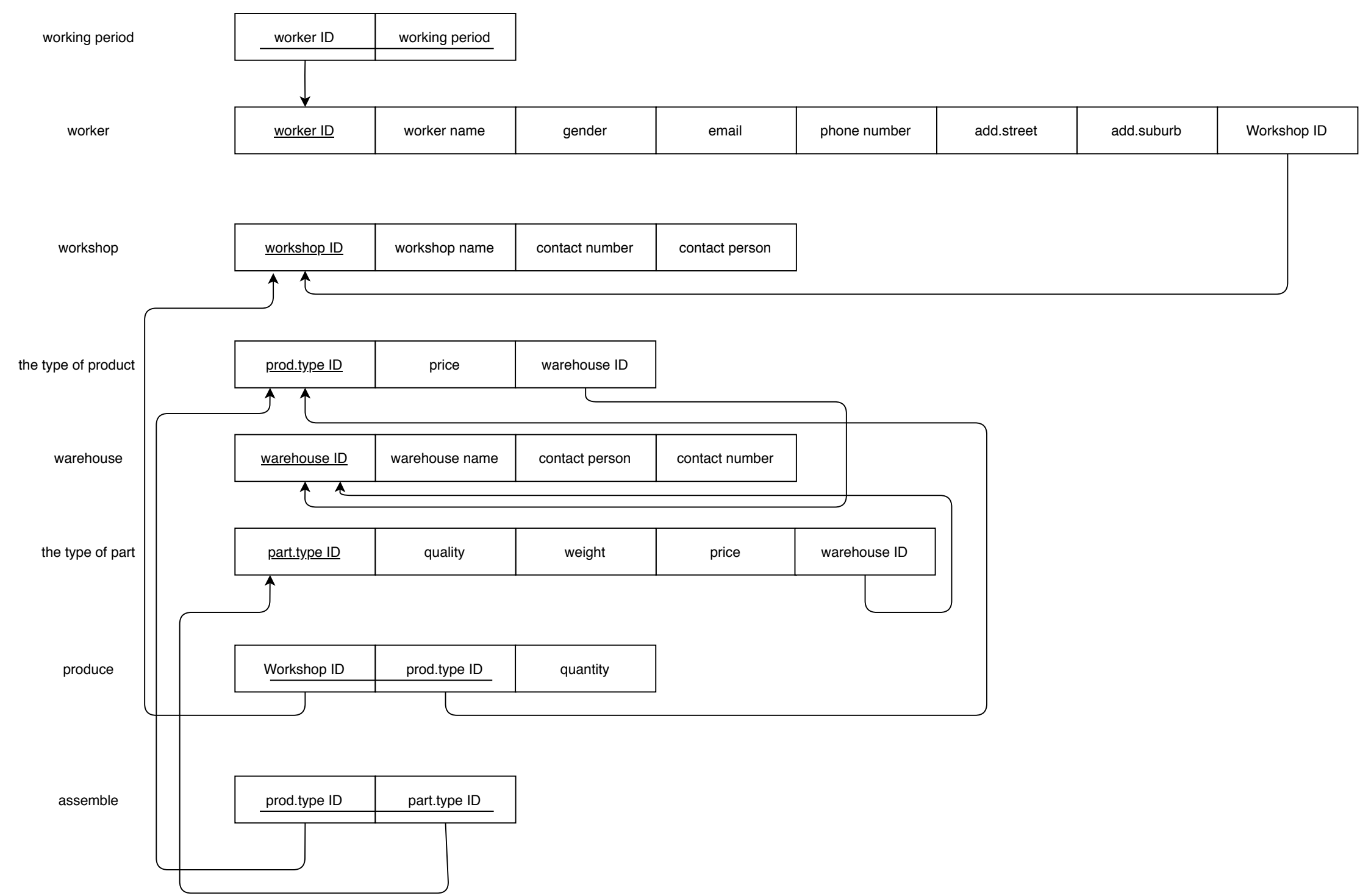


Question 1



Question 2



Question 3

- 1) $\pi_{\{pName\}}(customer \bowtie SalePerson \bowtie Sale \bowtie \sigma_{(d.name=Sydney\ City\ Toyota) \wedge (location=Waterloo)}(CarDealership))$
- 2) $\pi_{\{sName\}}(\pi_{\{sName, brand\}}(SalePerson \bowtie Sale \bowtie Car) \div \pi_{\{brand\}}(Car))$
- 3) $A \leftarrow \pi_{\{dName\}}(CarDealership \bowtie \sigma_{(brand=Audi)}(Car) \bowtie Sale \bowtie SalePerson)$
- $B \leftarrow \pi_{\{dName\}}(CarDealership \bowtie \sigma_{(brand=Mazda)}(Car) \bowtie Sale \bowtie SalePerson)$
- $C \leftarrow A - B$
- 4) $A \leftarrow \pi_{\{pName\}}(Customer \bowtie \sigma_{(condition=brand-new)}(Car) \bowtie Sale)$
- $B \leftarrow \pi_{\{pName\}}(Customer \bowtie \sigma_{(condition=used)}(Car) \bowtie Sale)$
- $C \leftarrow (A - B) \cup (B - A)$