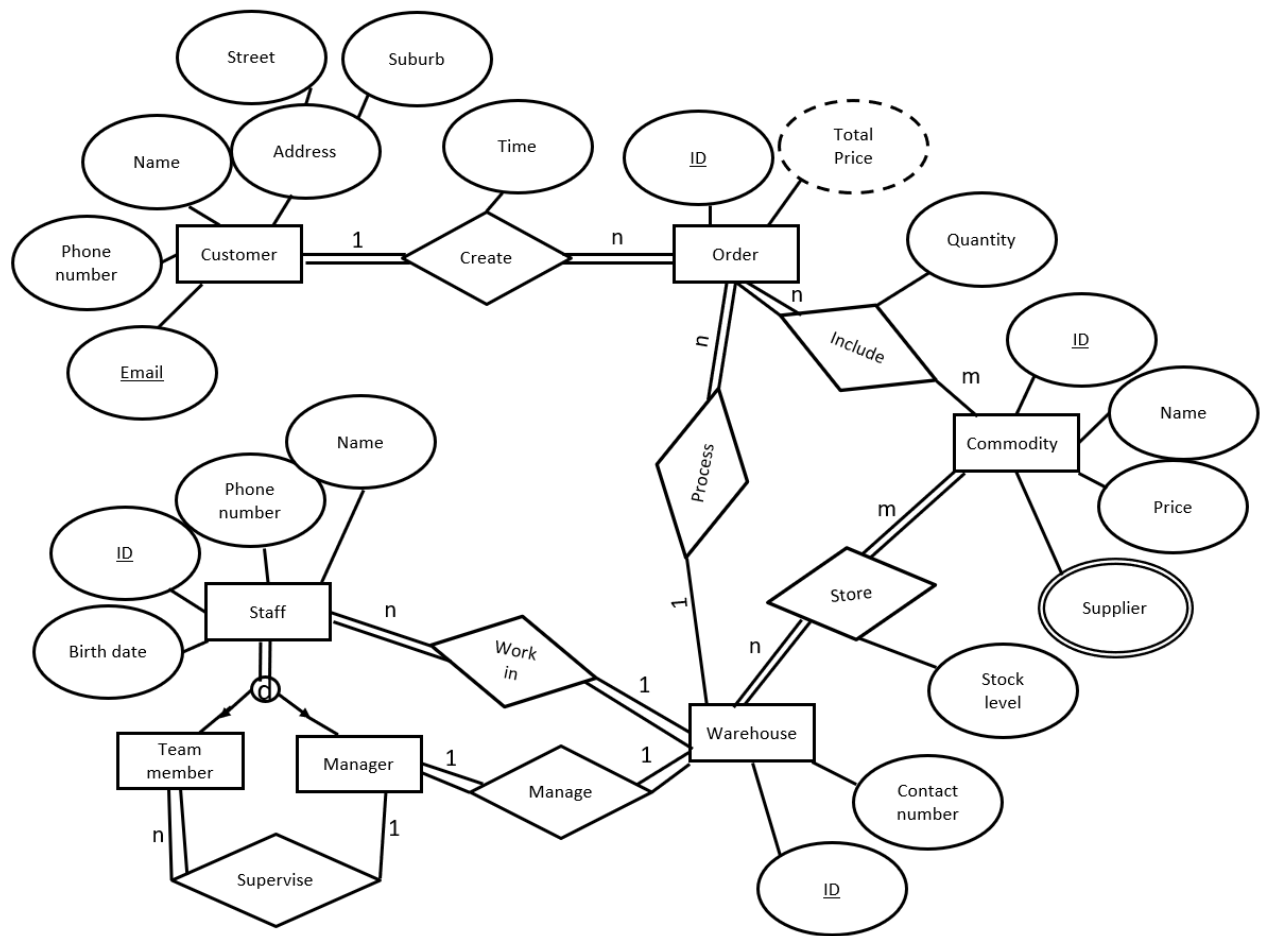
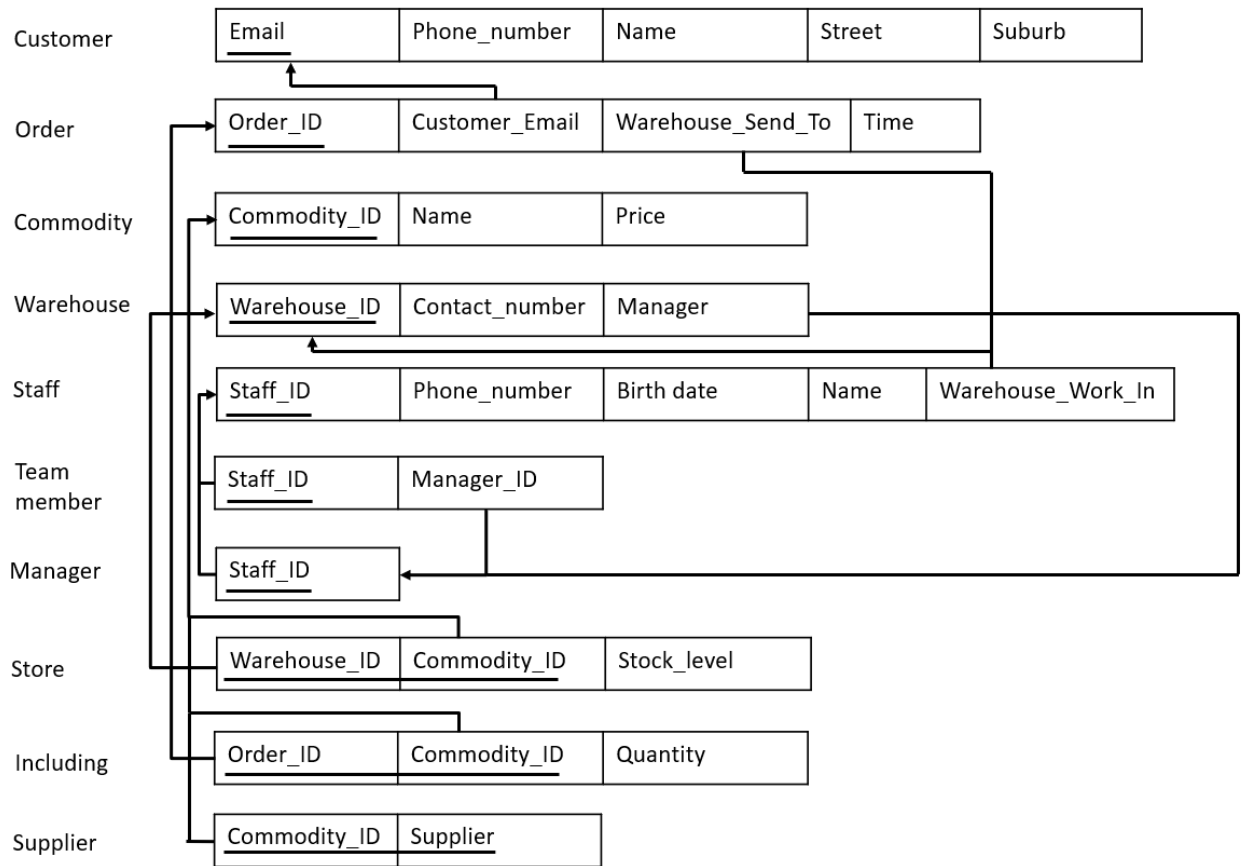


Question 1



Question 2



Question 3

- 1) $\Pi_{\text{name}}((\sigma_{\text{gender}='Female'}(\text{Student})) \bowtie \text{Enrolment} \bowtie (\sigma_{\text{job}='designer'}(\text{JobRequirement})))$
- 2) $A \leftarrow \Pi_{\text{name}}(\text{Student} \bowtie (\text{Enrolment} \div \Pi_{\text{courseID}}(\sigma_{\text{job}='designer'}(\text{JobRequirement}))))$
 $B \leftarrow \Pi_{\text{name}}(\text{Student} \bowtie \text{Enrolment} \bowtie (\sigma_{\text{faculty}='law'}(\text{Course})))$
 $C \leftarrow A - B$
- 3) $A \leftarrow \Pi_{\text{courseName}}(\text{Course} \bowtie \text{Enrolment} \bowtie (\sigma_{\text{gender}='female'}(\text{Student})))$
 $B \leftarrow \Pi_{\text{courseName}}(\text{Course} \bowtie \text{Enrolment} \bowtie (\sigma_{\text{gender}='male'}(\text{Student})))$
 $C \leftarrow (A - B) \cup (B - A)$