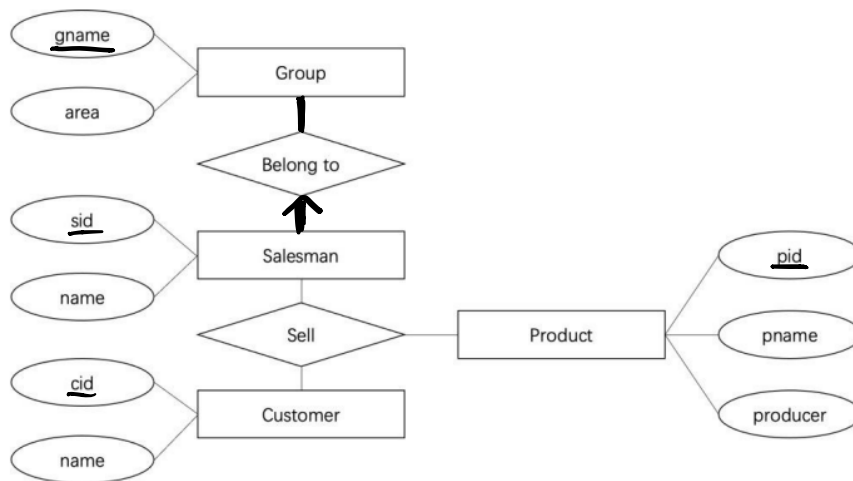


Q1(a) superkey: $\{pid\}$,
 $\{pid, pname\}$,
 $\{pid, producer\}$,
 $\{pname, producer\}$,
 $\{pid, pname, producer\}$

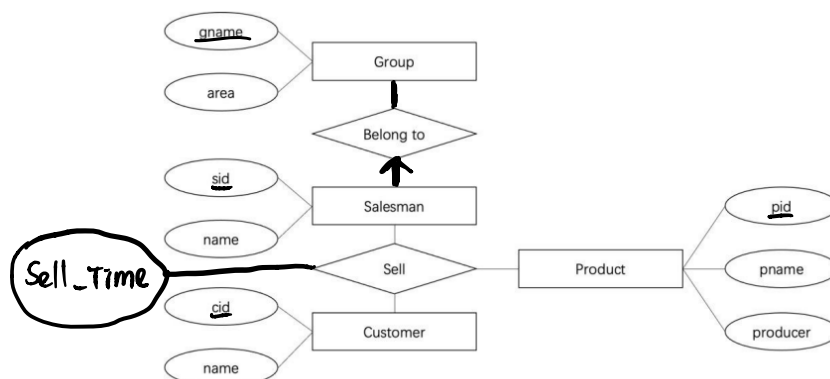
candidate key: $\{pid\}$,
 $\{pname, producer\}$

Q1(b)



Q1(c) No. If the salesman, product and customer are the same, then the two records will be the same so these two records would be considered as duplicate rows in database, one of it will be eliminated.

To emphasise the difference, we add an attributes Sell_Time to Sell relation. Therefore, these two records can be identified



Q2(a) Device (mac_address : string,
name : string)

Can_access (original_device_mac_address : string,
accessible_device_mac_address : string)

Q2(b) People (id : string,
name : string)

Project (date : date,
title : string,
id : string)

Take_charge_of (id : string,
date : date)

Q3

