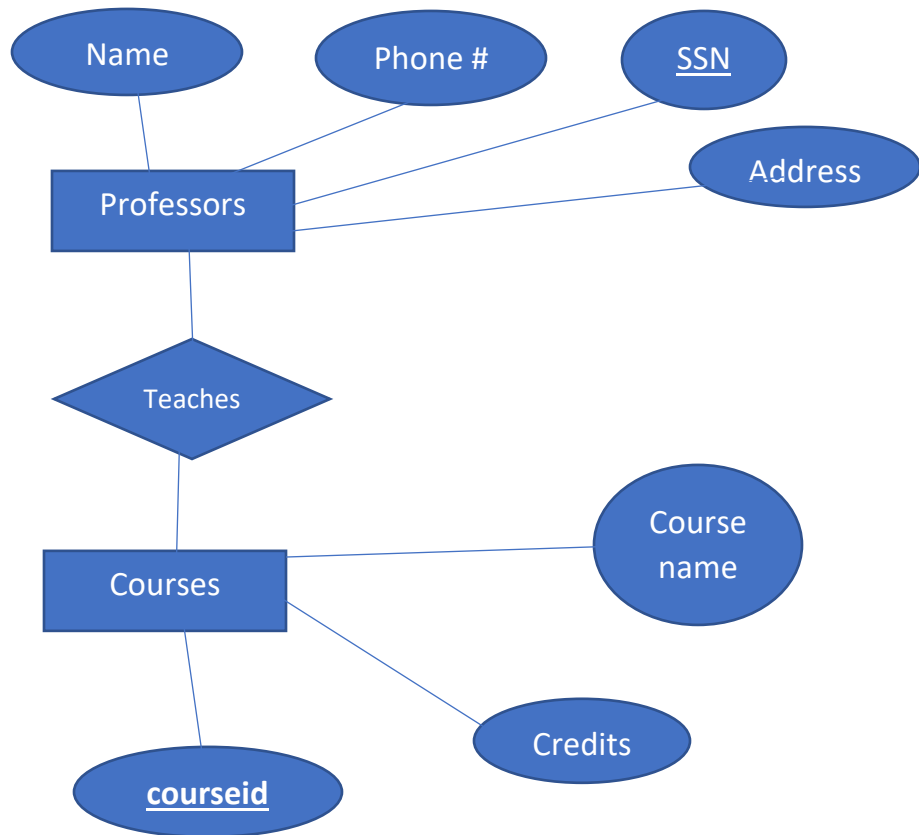
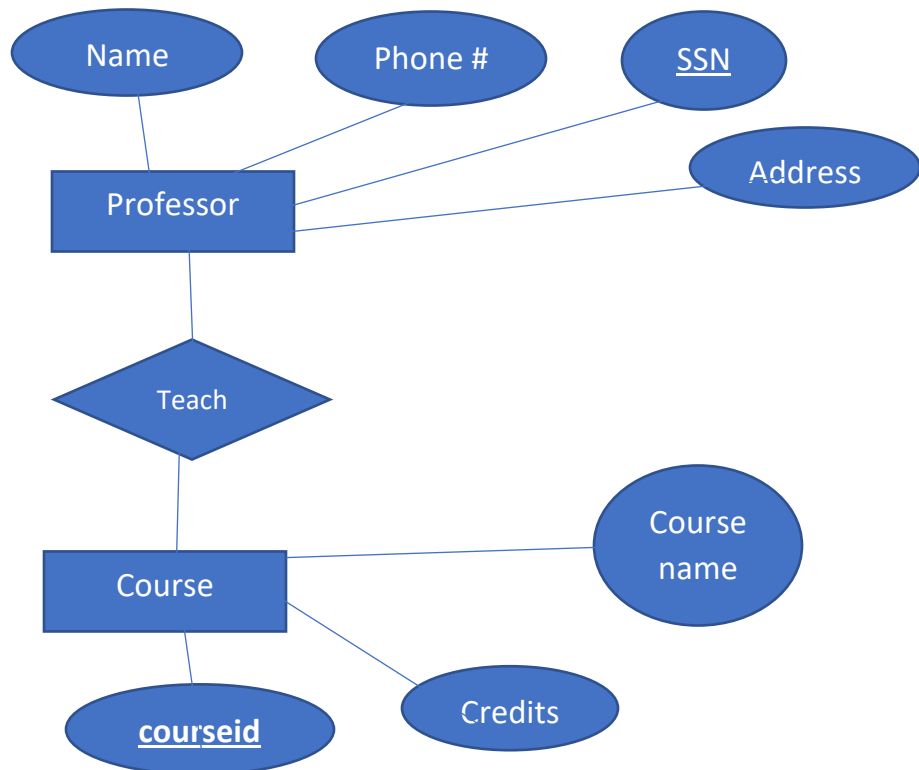
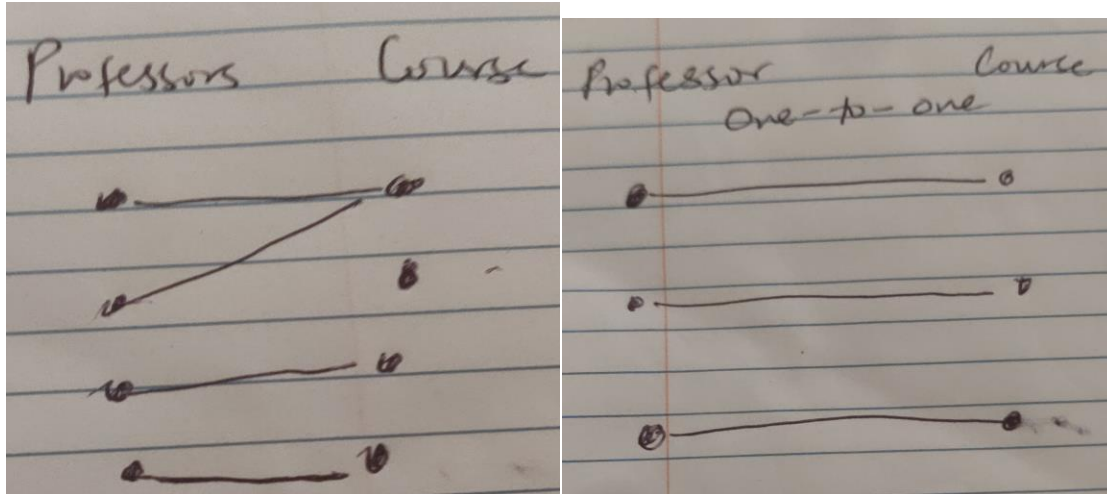


a.



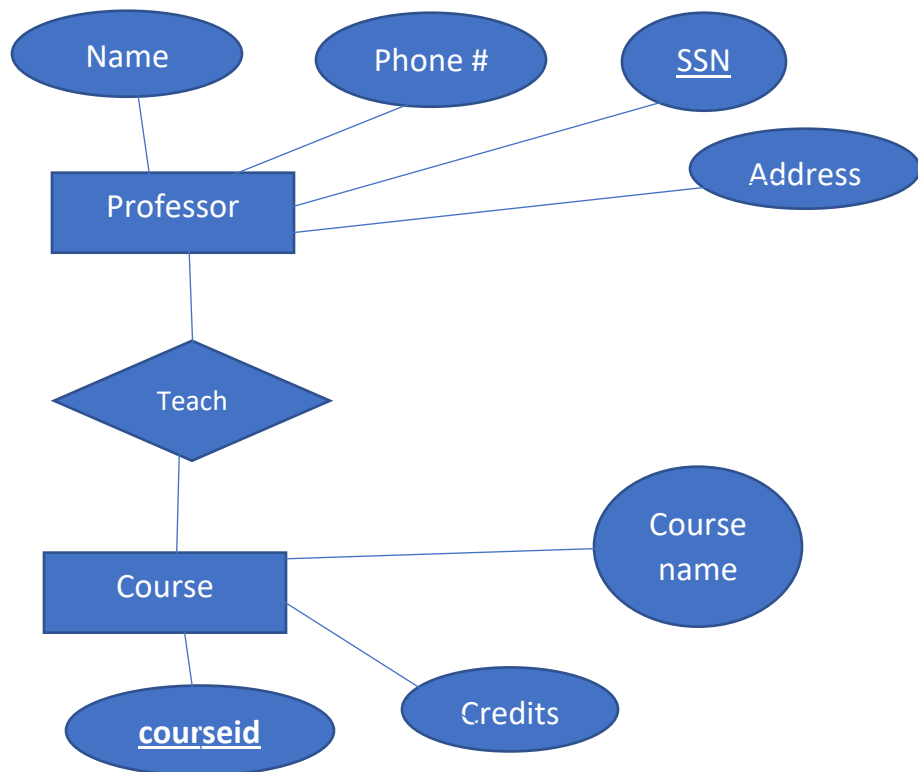
b.





this is not a one-to-one relation because a course might not be taught by a professor at all which mean it also includes the one-to-one relation also!!!

c.



This is a one-to-one ER model for professors and courses!!!

