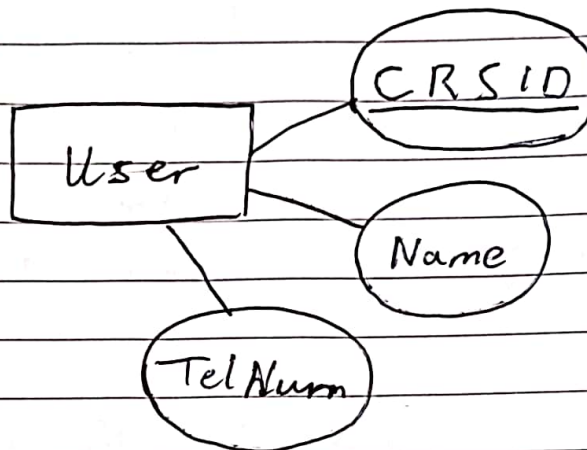
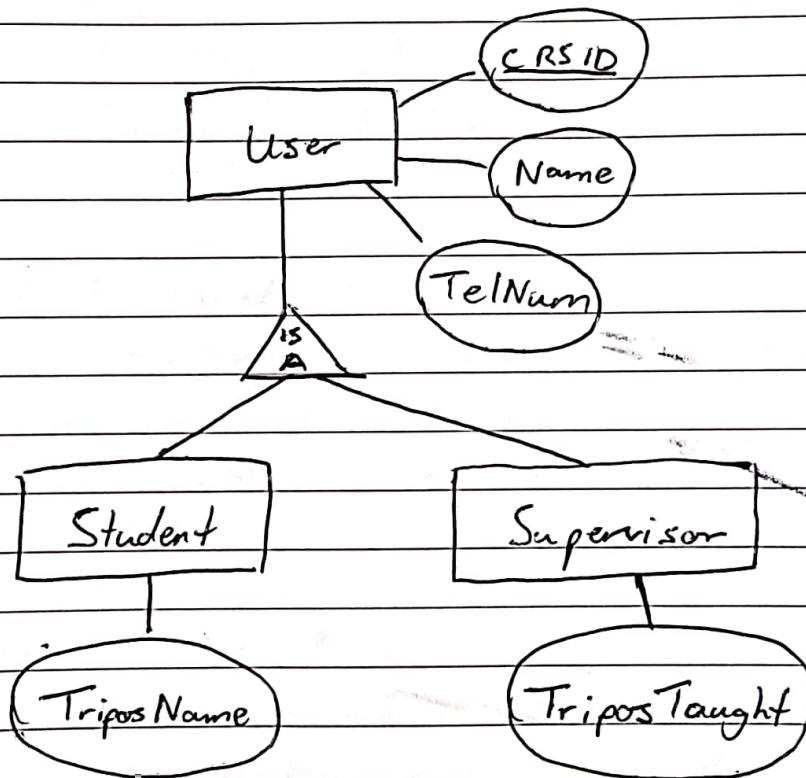


Harry Longford Hjel 2

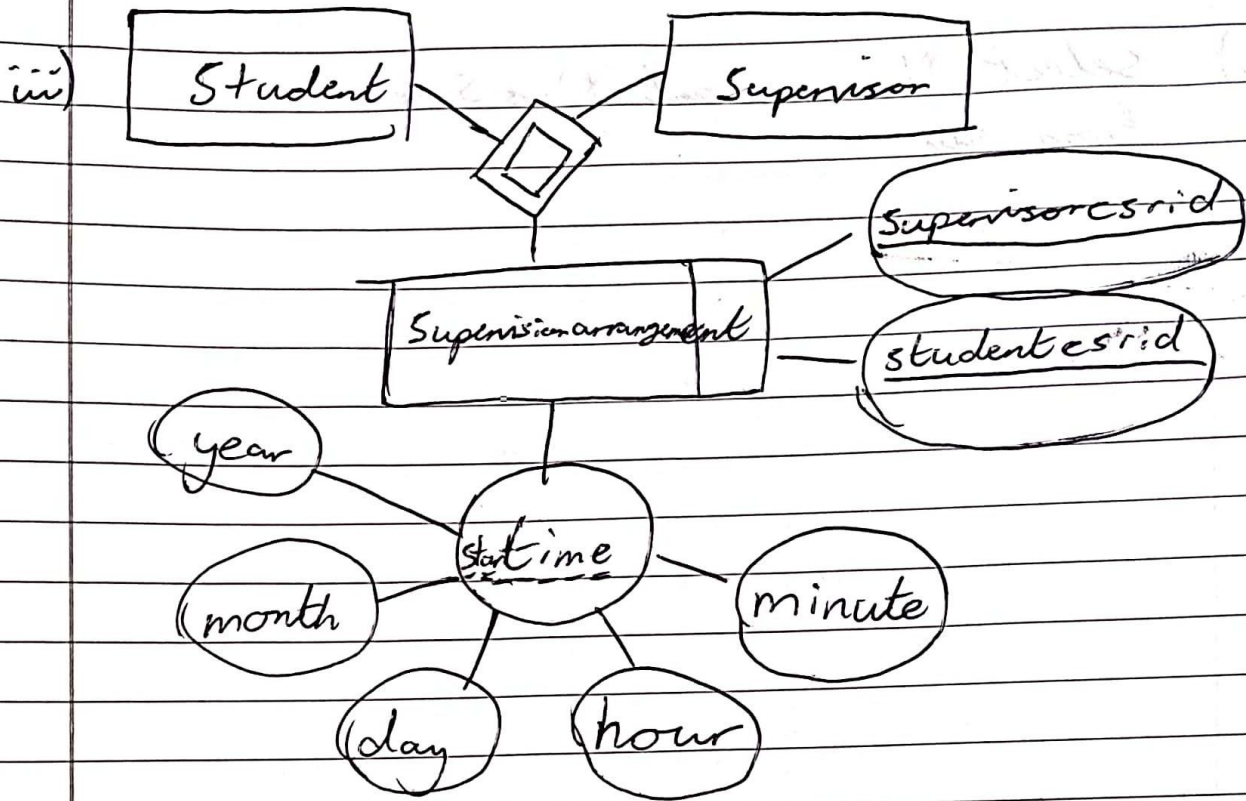
2. a) i)



ii)



We have the diamond inheritance problem and so have to disambiguate by



b) i) `select count (*)`
`from supervisionarrangement as sva`
`where sva.supervisorcsrid = sva.studentcsrid`
`group by statime, sv supervisorcsrid, studentcsrid;`
`select count`

ii) `select count (*)`
`from supervisionarrangement as sva`
`join supervisor as sv on sv.csrid = sva.supervisorcsrid`
`join student as st on st.csrid = sva.studentcsrid`
`where st.Name = sv.Name and st.csrid < sv.csrid`
`group by timestatime, supervisorcsrid, studentcsrid`
`;`

iii) Select sv.name as Name, count(*) as Size
 from supervision arrangement as sva
 join supervisor as sv on sva.supervisorcsrid = sv.csrid
 group by time, sv.csrid
 ;

iv) ~~Select sv.name as Name, count(*)~~

~~iv) select sv.name as Name, ^{Studs/total} ~~avg(sv)~~ as averagesize
 order by Name
 from supervisor as sv
 join (select supervisorcsrid, count(*)
 from supervision arrangement as sva~~

iv) select sv.name as Name, Stds.total/svs.total as
 averagesize order by Name
 from supervisor as sv
 join (
 select Supervisorcsrid as csrid, count(*) as total
 from supervision arrangement as sva
 group by time, supervisorcsrid
) as svs on svs.csrid = sv.csrid
 join (
 select supervisorcsrid as csrid, count(*) as total
 from supervision arrangement as sva
 group by time
) as stds on stds.csrid = sv.csrid
 ;


```

v) select distinct g.Name as Name1, c.Name as Name2
    from supervisors as g
    join supervisionarrangement as sva1 on sva1.supervisorcsrid
        = g.csrid
    join p-supervisors as p on p.csrid = sva1.studentcsrid
    join supervisionarrangement as sva2 on sva2.supervisorcsrid
        = p.csrid
    join students as c on c.csrid = sva2.studentcsrid
    where p.csrid <> g.csrid and p.csrid <> c.csrid
        and g.csrid <> c.csrid
;

```