

Melvin Evans
Csc 134 - 01

Assignment #3

1. $EMP_SSN_IN_PROJ(SSN) \leftarrow \pi_{ESSN}(Works_On)$
 $ALL_EMP_SSN \leftarrow \pi_{SSN}(Employee)$
 $EMP_SSN_NOT_ON_PROJ \leftarrow ALL_EMP_SSN - EMP_SSN_IN_PROJ$
 $Result \leftarrow \pi_{fName, lName}(EMP_SSN_NOT_ON_PROJ * Employee)$
2. $PROJ_ABC \leftarrow \sigma_{pname='ABC'}(project)$
 $EMP_ABC \leftarrow Employee \bowtie_{SSN=ESSN} works_on \bowtie_{pno=pnumber} PROJ_ABC$
 $EMP_WORK \leftarrow \sigma_{hours > 9}(EMP_ABC)$
 $Result \leftarrow \pi_{fName, lName}(EMP_WORK)$
3. $ALL_DPT_IN_DEN \leftarrow \sigma_{dLocation='Denver'}(dept_location)$
 $DPT_IN_DEN \leftarrow Department \bowtie_{dNumber=dNumber} ALL_DPT_IN_DEN$
 $Result \leftarrow \pi_{dName} DPT_IN_DEN$
4. $STEVEN_SSN \leftarrow \pi_{SSN}(\sigma_{lName='Miller' \text{ and } fName='Steven'} Employee)$
 $Result \leftarrow \pi_{fNamew, lName}(Employee \bowtie_{superSSN=SSN} STEVEN_SSN)$