

a)  $Houston\_Proj(Pno) \leftarrow \Pi_{Pnumber}(\sigma_{Plocation = "Houston"}(PROJECT))$

$Houston\_Employee(SSN) \leftarrow \Pi_{ESSN}(WORKS\_ON * Houston\_Proj)$

$Result \leftarrow \Pi_{Fname, Lname}(EMPLOYEE * Houston\_Employee)$

Fname	Lname
Franklin	Wong
Jennifer	Wallace
James	Borg

b) Salary = 26000\$  $\leftarrow \Pi_{Fname, Lname, SSN}$

$(\sigma_{Salary > 26000} (EMPLOYEE))$

DResearch(Dnum)  $\leftarrow \Pi_{Dnumber} (\sigma_{Dname = 'Research'} (DEPARTMENT))$

RDPSugarland(Pno)  $\leftarrow \Pi_{Pnumber} (\sigma_{Plocation = 'Sugarland'}$

$(PROJECT) * DResearch)$

WORKS - EMP(SSN)  $\leftarrow \Pi_{ESSN} (WORKS - ON * RDPSugarland)$

Emp.  $\leftarrow \Pi_{Fname, Lname, SSN} (EMPLOYEE * WORKS - EMP)$

Result  $\leftarrow \text{Salary} = 26000\$ \cap \text{Emp.}$

Fname	Lname	SSN.
John	Smith	123456789
Franklin	Wong	333445555