Relational Algebra Example

SELECT S.sname $\pi_{S.sname}$

FROM students S $\quad$ students $\bowtie_{S.sid=E.sid}$ enrollment
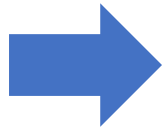
$\quad$ **JOIN enrollment E ON S.sid = E.sid**

$\quad$ **JOIN courses C ON E.cid = C.cid** $\quad \bowtie_{E.cid=C.cid}$ courses

WHERE S.major = 'Data Science'

$\quad$ **AND C.cname = 'DS5700'**

σ S.major='Data Science' $\wedge$ C.cname='DS5700'

$$\pi_{S.sname}(\\
\quad \sigma \text{S.major='Data Science'} \wedge \text{C.cname='DS5700'}(\\
\quad\quad (\text{students} \bowtie_{S.sid=E.sid} \text{enrollment}) \bowtie_{E.cid=C.cid} \text{courses}\\
\quad)\\
)$$