Q1. Consider the following datalog program.

\begin{align*}
R(1,2) \\
R(1,3) \\
S(5,6) \\
S(3,7) \\
S(2,7) \\
T(x,z) & : - R(x,y), S(y,z), y > 2 \\
T(x,z) & : - R(x,y), S(y,z), z > 6
\end{align*}

1. Use the assignment table method to construct the result of relation $T$.
2. Write the relational algebra query corresponding the datalog program.

Q2. Consider the following relations.

\begin{align*}
\text{Movies}(\text{title}, \text{year}, \text{length}, \text{genre}, \text{studioName}) \\
\text{StarsIn}(\text{movieTitle}, \text{movieYear}, \text{starName})
\end{align*}

Write a datalog program to find the actors that starred in ‘sci-fi’ movies produced by ‘Disney’.