Determine the leftmost derivation of these sentences

b c b

g g h h x c

x c

#	Rules
1	$S \rightarrow A\,\$$
2	$S \rightarrow K\,L\,A\,\$$
3	$A \rightarrow b\,A$
4	$A \rightarrow c\,A$
5	$A \rightarrow \lambda$
6	$K \rightarrow g\,K\,h$
7	$K \rightarrow \lambda$
8	$L \rightarrow x$

Determine the leftmost derivation of these sentences

$$
\begin{array}{lll}
(1) & S \Rightarrow & A\ \$ \\
(3) & S \Rightarrow & b\ A\ \$ \\
(4) & S \Rightarrow & b\ c\ A\ \$ \\
(3) & S \Rightarrow & b\ c\ b\ A\ \$ \\
(5) & S \Rightarrow & b\ c\ b\ \$
\end{array}
$$

$$
\begin{array}{lll}
(2) & S \Rightarrow & K\ L\ A\ \$ \\
(7) & S \Rightarrow & L\ A\ \$ \\
(8) & S \Rightarrow & x\ A\ \$ \\
(4) & S \Rightarrow & x\ c\ A\ \$ \\
(5) & S \Rightarrow & x\ c\ \$
\end{array}
$$

$$
\begin{array}{lll}
(2) & S \Rightarrow & K\ L\ A\ \$ \\
(6) & S \Rightarrow & g\ K\ h\ L\ A\ \$ \\
(6) & S \Rightarrow & g\ g\ K\ h\ h\ L\ A\ \$ \\
(7) & S \Rightarrow & g\ g\ h\ h\ L\ A\ \$ \\
(8) & S \Rightarrow & g\ g\ h\ h\ x\ A\ \$ \\
(4) & S \Rightarrow & g\ g\ h\ h\ x\ c\ A\ \$ \\
(5) & S \Rightarrow & g\ g\ h\ h\ x\ c\ \$
\end{array}
$$

#	Rules
1	$S \rightarrow A\ \$$
2	$S \rightarrow K\ L\ A\ \$$
3	$A \rightarrow b\ A$
4	$A \rightarrow c\ A$
5	$A \rightarrow \lambda$
6	$K \rightarrow g\ K\ h$
7	$K \rightarrow \lambda$
8	$L \rightarrow x$

Which terminals predict which Starting Goal rule?

#	Rules
1	$S \rightarrow A\,\$$
2	$S \rightarrow K\,L\,A\,\$$
3	$A \rightarrow b\,A$
4	$A \rightarrow c\,A$
5	$A \rightarrow \lambda$
6	$K \rightarrow g\,K\,h$
7	$K \rightarrow \lambda$
8	$L \rightarrow x$

Which terminals predict which Starting Goal rule?

Which starting goal rules does an empty sentence (without tokens) predict?

#	Rules
1	$S \rightarrow A\,\$$
2	$S \rightarrow K\,L\,A\,\$$
3	$A \rightarrow b\,A$
4	$A \rightarrow c\,A$
5	$A \rightarrow \lambda$
6	$K \rightarrow g\,K\,h$
7	$K \rightarrow \lambda$
8	$L \rightarrow x$

Which terminals predict which Starting Goal rule?

Which starting goal rules does an empty sentence (without tokens) predict?

#	Rules
1	$S \rightarrow A\,\$$
2	$S \rightarrow K\,L\,A\,\$$
3	$A \rightarrow b\,A$
4	$A \rightarrow c\,A$
5	$A \rightarrow \lambda$
6	$K \rightarrow g\,K\,h$
7	$K \rightarrow \lambda$
8	$L \rightarrow x$

Congrats, now you know about **predict sets**.