The important issue is the logic you used to arrive at your answer.

1. Prove that the program segment

\[
\begin{align*}
y &:= 1 \\
z &:= x+y
\end{align*}
\]

is correct with respect to precondition "\(x = 0\)" and postcondition "\(z = 1\)".

2. Prove that the program segment

\[
\text{if } x < 0 \text{ then } x := 0
\]

is correct with respect to precondition "true" and postcondition "\(x \geq 0\)".
3. Prove that the program segment

\[
\begin{align*}
    x &:= 0 \\
    z &:= x+y \\
    \textbf{if} \ x < 0 \ \textbf{then} \\
    \quad z &:= z+1 \\
    \textbf{else} \\
    \quad z &:= 7 \\
    \textbf{else}
\end{align*}
\]

is correct with respect to precondition "y = 3" and postcondition "z = 7".