Example for the definition of a lift

Program SUM:

1. $sum(x, 0, x) \leftarrow$,
2. $sum(x, s(y), s(z)) \leftarrow sum(x, y, z)$,

An SLD-derivation ξ:
$sum(s(s(0)), s(s(0)), z) \Rightarrow_2 sum(s(s(0)), s(0), z_1) \Rightarrow_2$
$sum(s(s(0)), 0, z_2) \Rightarrow_1 []$

An SLD-derivation ξ':
$sum(x', y', z') \Rightarrow_2 sum(x'_1, y'_1, z'_1) \Rightarrow_2 sum(x'_2, y'_2, z'_2) \Rightarrow_1 []$

An SLD-derivation ξ'':
$sum(x', y', z') \Rightarrow_2 sum(x'_1, y'_1, z'_1) \Rightarrow_2 sum(x'_2, y'_2, z'_2) \Rightarrow_2$
$sum(x'_3, y'_3, z'_3) \ldots$