Let \( n \) be a natural constant. Let \( S: n^*nat \) be an implementer's variable. It is being reimplemented by \( R: n^*nat \) representing the same \( n \) naturals but in the reverse order.

(a) What is the data transformer?

\[
D = \forall j: 0,..,n \cdot S_j = R_{n-j-1}
\]

(b) A user has variable \( i: nat \) and the operation

\[
\text{get } = i := S_i
\]

Use your transformer from part (a) to transform \( \text{get} \).

\[
\forall S: D \Rightarrow \exists S': D' \land \text{get}
\]

\[
= \forall S': (\forall j: 0,..,n \cdot S_j = R_{n-j-1}) \Rightarrow \exists S': (\forall j: 0,..,n \cdot S'_j = R'_{n-j-1}) \land (i := S_i)
\]

\[
= i := R_{n-i-1}
\]