

$$\mathbf{i}_1 \leftarrow 0$$

$$\mathbf{i}_3 \leftarrow \begin{matrix} \phi(\mathbf{i}_1, \mathbf{i}_4) \\ S \end{matrix}$$

$$\mathbf{i}_2 \leftarrow \begin{matrix} \mathbf{i}_3 + 1 \\ S' \end{matrix}$$

$$\mathbf{i}_4 \leftarrow \mathbf{i}_2 + 1$$