$I \equiv \{(0 \leq i \leq |s|) \wedge (result = true \leftrightarrow (\forall k:\mathbb{Z})(0 \leq k < i \rightarrow_L s[k] \neq 7)\}$

$(I \wedge \neg B) \rightarrow Q_c$

$I \wedge \neg B \equiv \underbrace{(i = |s|)}_{\substack{\text{porque} \\ 0 \leq i \leq |s| \wedge i \geq |s|}} \wedge result = true \leftrightarrow (\forall k:\mathbb{Z})(0 \leq k < \underbrace{|s|}_{\substack{\text{porque} \\ i=|s|}} \rightarrow s[k] \neq 7)$

Por lo que $I \wedge \neg B \rightarrow Q_c$ ya que $I \wedge \neg B \equiv (i = |s| \wedge Q_c)$

$\{I \wedge B\} \underbrace{S}_{\text{cuerpo del ciclo}} \{I\}$ $\quad (I \wedge B) \rightarrow wp(i := i+1, \underbrace{wp(result := result \wedge (s[i-1] \neq 7)), I)}_{E_1})$

$E_1 \equiv \underbrace{def(result)}_{true} \wedge \underbrace{def(s[i-1])}_{0 \leq i-1 < |s|} \wedge I^{result}_{result \wedge (s[i-1] \neq 7)}$

$\equiv 0 \leq i-1 < |s| \wedge (0 \leq i \leq |s| \wedge ((result \wedge s[i-1] \neq 7) = true \leftrightarrow (\forall k:\mathbb{Z})(0 \leq k < i \rightarrow_L s[k] \neq 7) \equiv$

$\equiv -1 \leq i \leq |s| \wedge ((result \wedge s[i-1] \neq 7) = true \leftrightarrow (\forall k:\mathbb{Z})(0 \leq k < i \rightarrow_L s[k] \neq 7))$

$\cancel{\equiv 0 \leq \lambda \leq |S| \wedge ((result = true}$

$wp(\lambda := \lambda+1, E_1) \equiv E_2$

$E_2 = def(\lambda+1) \wedge {E_1}^{\lambda}_{\lambda+1} \equiv -1 \leq \lambda+1 \leq |S| \wedge ((result \wedge S[\lambda] \neq 7) = true \leftrightarrow (\forall k : \mathbb{Z})(0 \leq k < \lambda+1 \rightarrow_L S[k] \neq 7)) \equiv$

$\equiv 0 \leq \lambda < |S| \wedge ((result = true \wedge \underline{S[\lambda] \neq 7}) \leftrightarrow ((\forall k : \mathbb{Z})(0 \leq k < \lambda \rightarrow_L S[k] \neq 7) \wedge \underline{S[\lambda] \neq 7}))$

$S[\lambda] \neq 7 \leftrightarrow S[\lambda] \neq 7$

es una tautologia

$\cancel{\equiv 0 \leq \lambda < |S|}$

$\equiv 0 \leq \lambda < |S| \wedge ((result = true) \leftrightarrow (\forall k : \mathbb{Z})(0 \leq k < \lambda \rightarrow_L S[k] \neq 7)) \equiv I \wedge B$

se puede decir, entonces, que $I \wedge B \rightarrow E_2$ ya que $I \wedge B \equiv E_2$

~~~~ por lo que vale la tripla de Hoare $\{I \wedge B\} S \{I\}$
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