(a) $P \equiv \{0 \le i \le |s| \wedge_L i \bmod 3 = 0 \wedge$

$(\forall j : \mathbb{Z})(0 \le j < |s| \rightarrow_L s[j] \bmod 2 = 0\}$

En este caso $i = |s|$ es posible, lo que significa que el programa no satisface

(b)

$P \equiv \{0 \le i < |s| \wedge_L i \bmod 3 \neq 0 \wedge (\forall j : \mathbb{Z})(0 \le j < |s| \rightarrow_L s[j] \bmod 2 = 0)\}$

No se me ocurre ningún contraejemplo, voy a hallar la wp de el programa

$wp(S, Q) \equiv$

$def(i \bmod 3 = 0) \wedge_L$

$((B \wedge \underbrace{wp(S1, Q)}_{1}) \vee (\neg B \wedge \underbrace{wp(S2, Q)}_{2}))$

$1 \equiv \underbrace{i \bmod 3 = 0}_{} \wedge wp(s[i] := \overset{(A)}{s[i]} + 6, Q)$

$(A) \equiv wp(s := setAt(s, i, s[i] + 6), Q)$

$\equiv \underbrace{0 \le i < |s|}_{} \wedge_L Q^{s}_{setAt(s,i,s[i]+6)}$ (AA)

(AA) $(\forall j : \mathbb{Z})(0 \le j < |s| \rightarrow_L setAt(s, i, s[i] + 6)[j] \bmod 2 = 0)$

$\equiv (\forall j : \mathbb{Z})(0 \le j < |s| \rightarrow_L$

$(i \neq j \wedge s[j] \bmod 2 = 0) \vee$

$(i = j \wedge s[j] + 6 \bmod 2 = 0) \equiv s[j] \bmod 2 = 0$

$)$