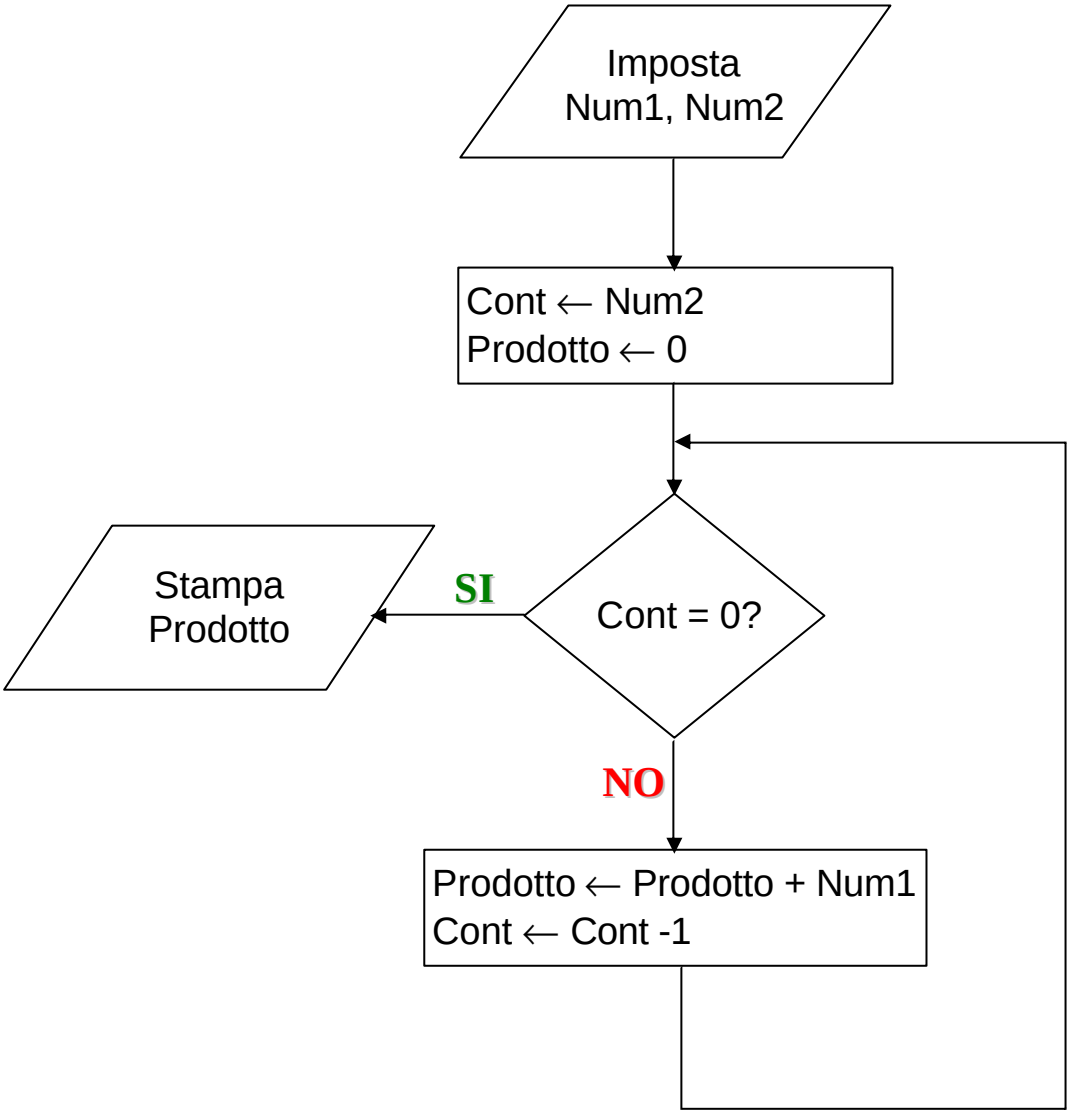
Esercizi di algoritmica

Esercizio I

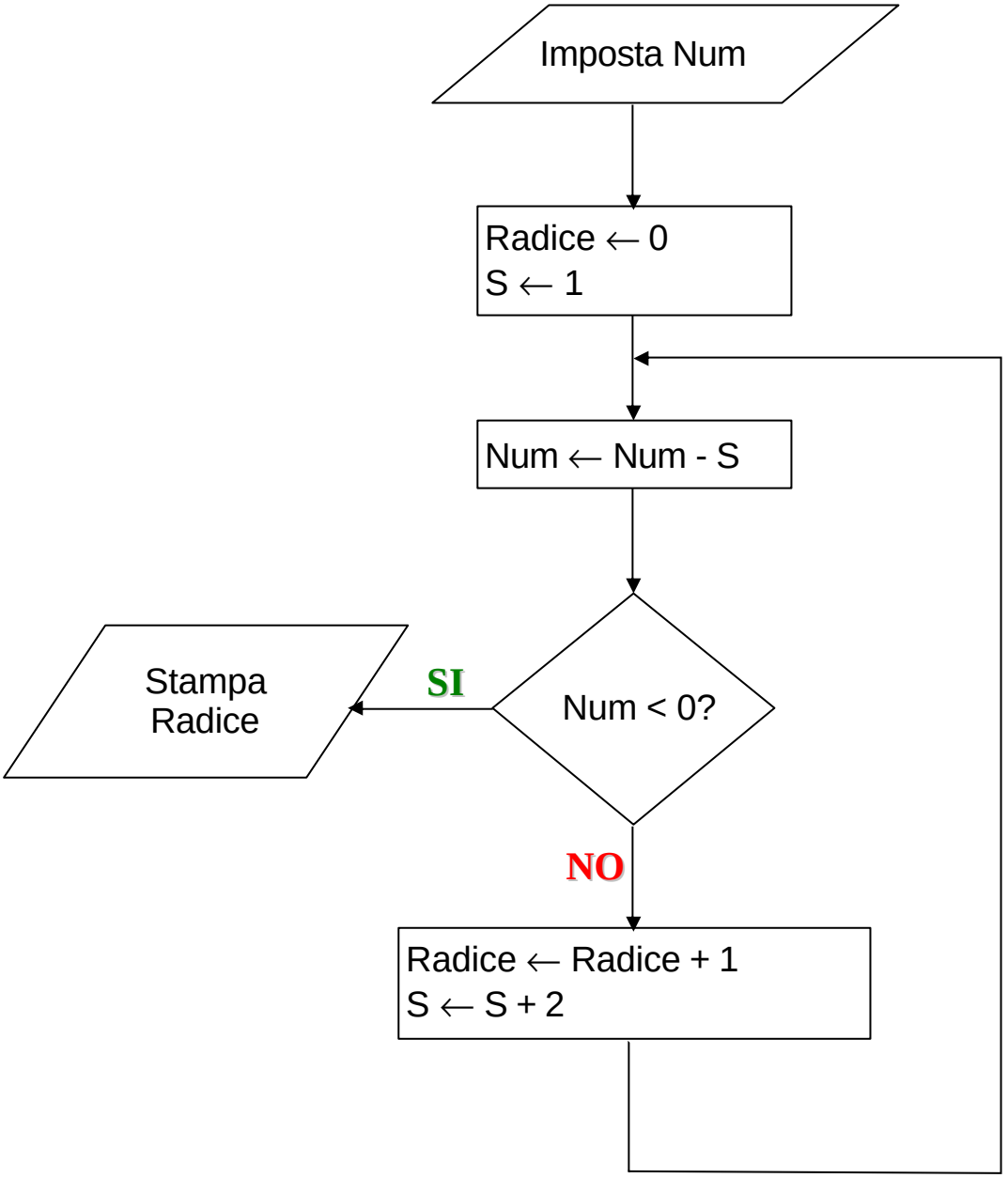
Moltiplicazione di due numeri tramite somme ripetute

$12 \cdot 3 = 12+12+12$



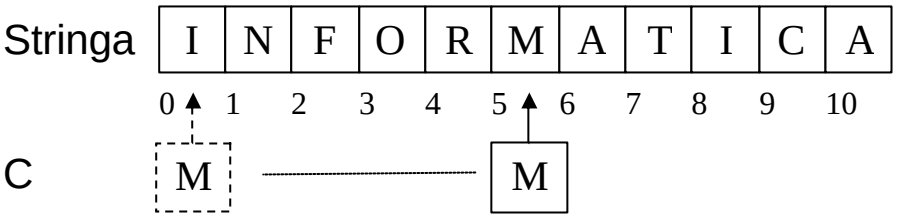
Esercizio II

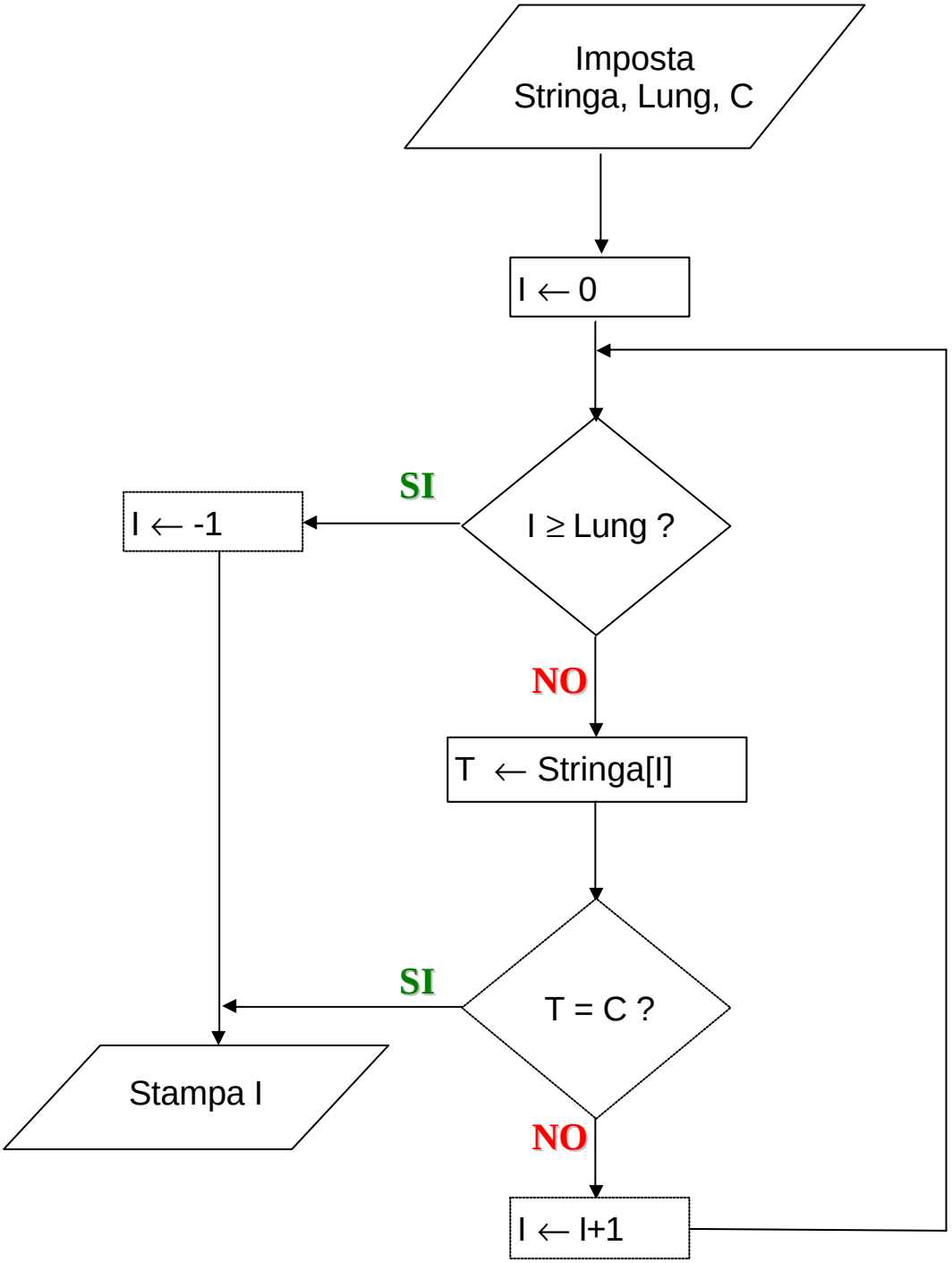
Estrazione di radice intera



Esercizio III

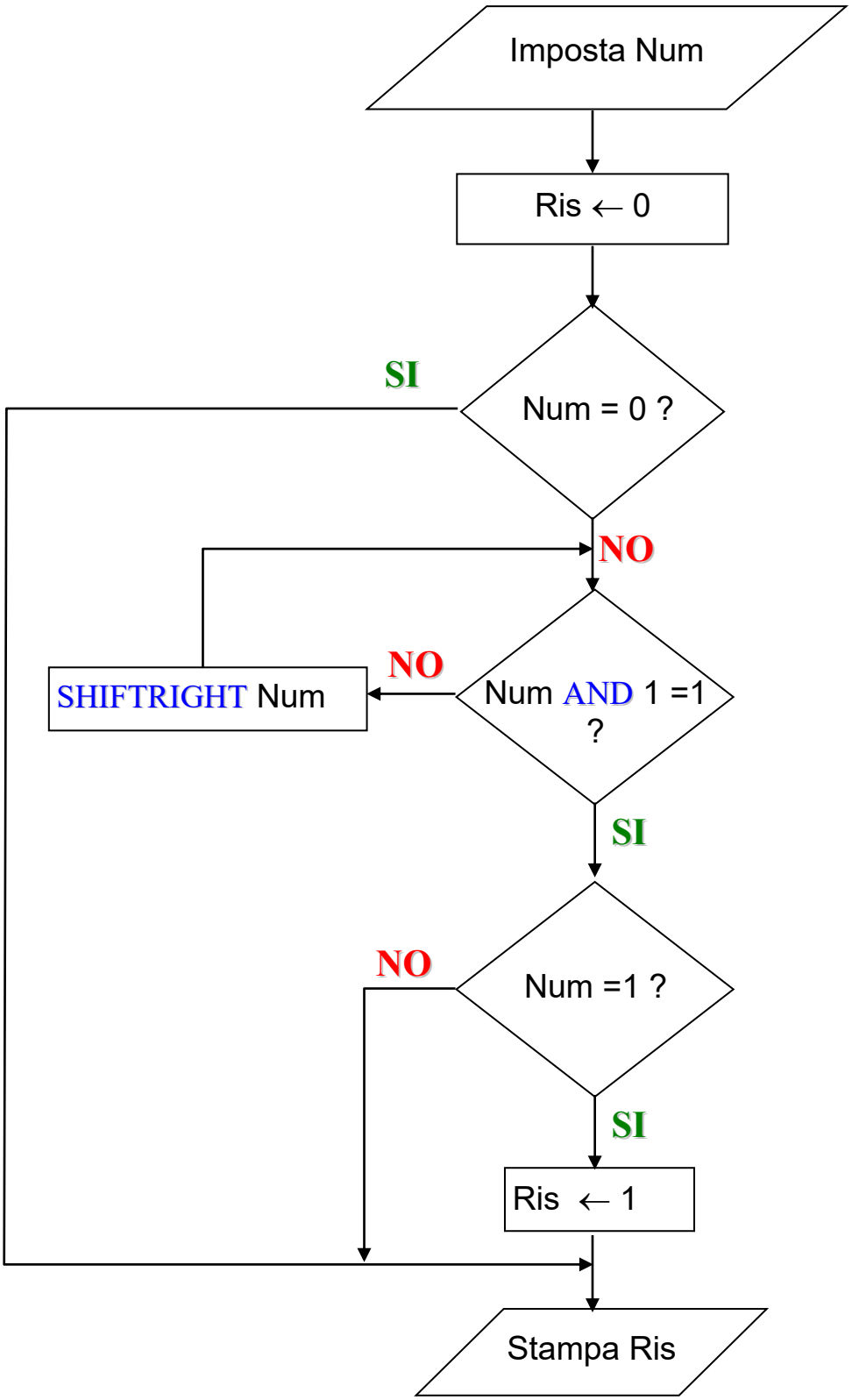
Ricerca di un carattere in una stringa





Esercizio IV

Verificare se un numero è una potenza di 2 (Se si stampa 1, altrimenti 0)

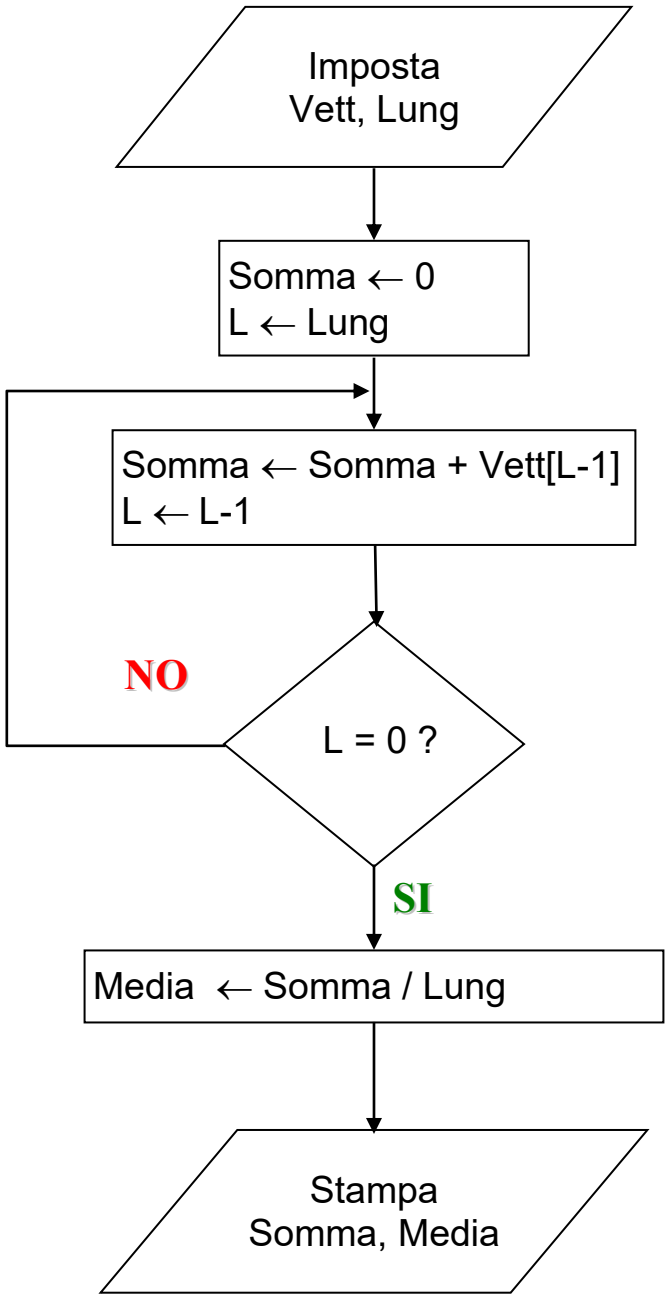


Esercizio V

Somma e media degli elementi in un vettore

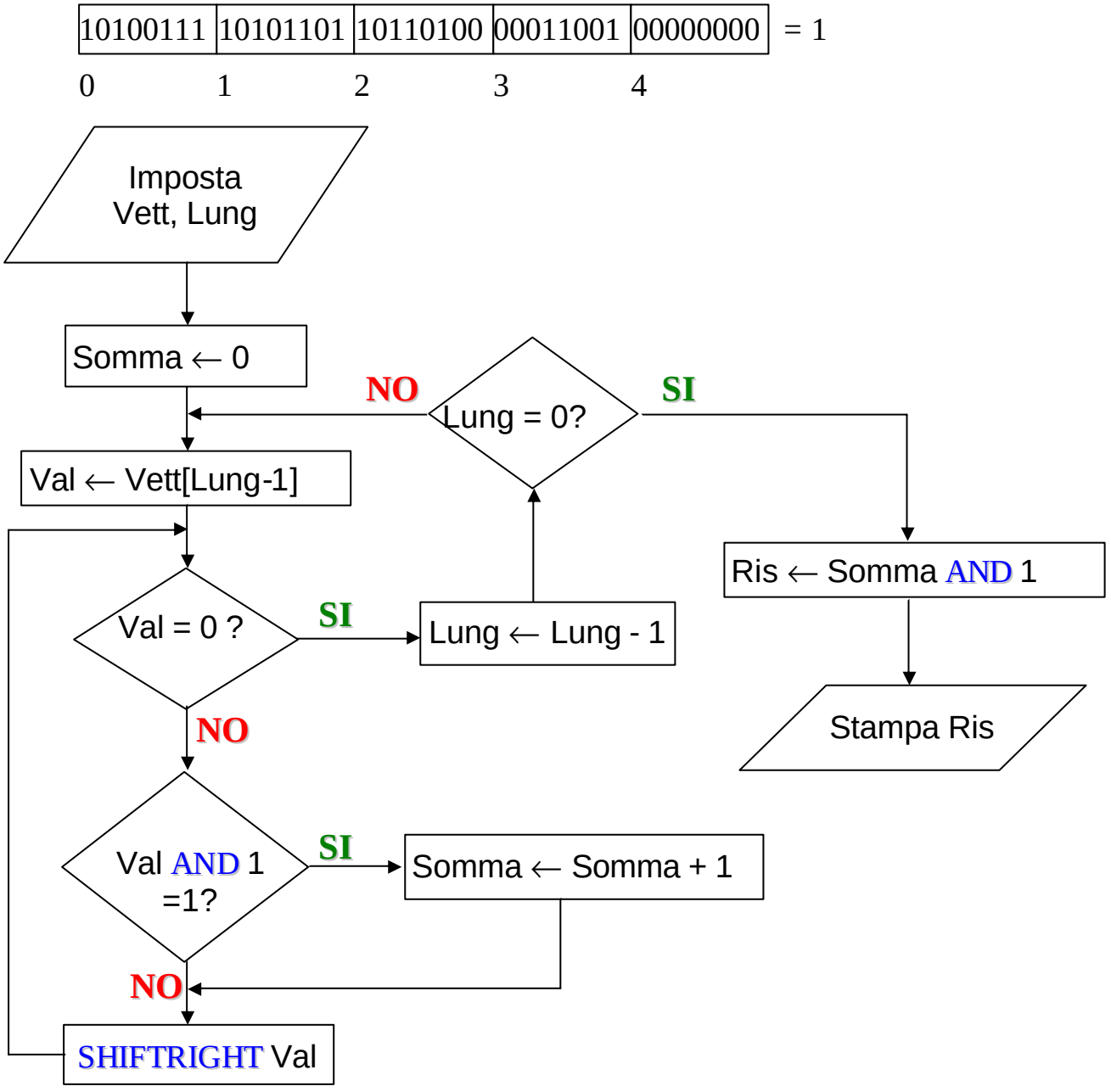
Lung=11 Vett

1	3	5	-7	4	-9	12	-1	0	-12	23
0	1	2	3	4	5	6	7	8	9	10



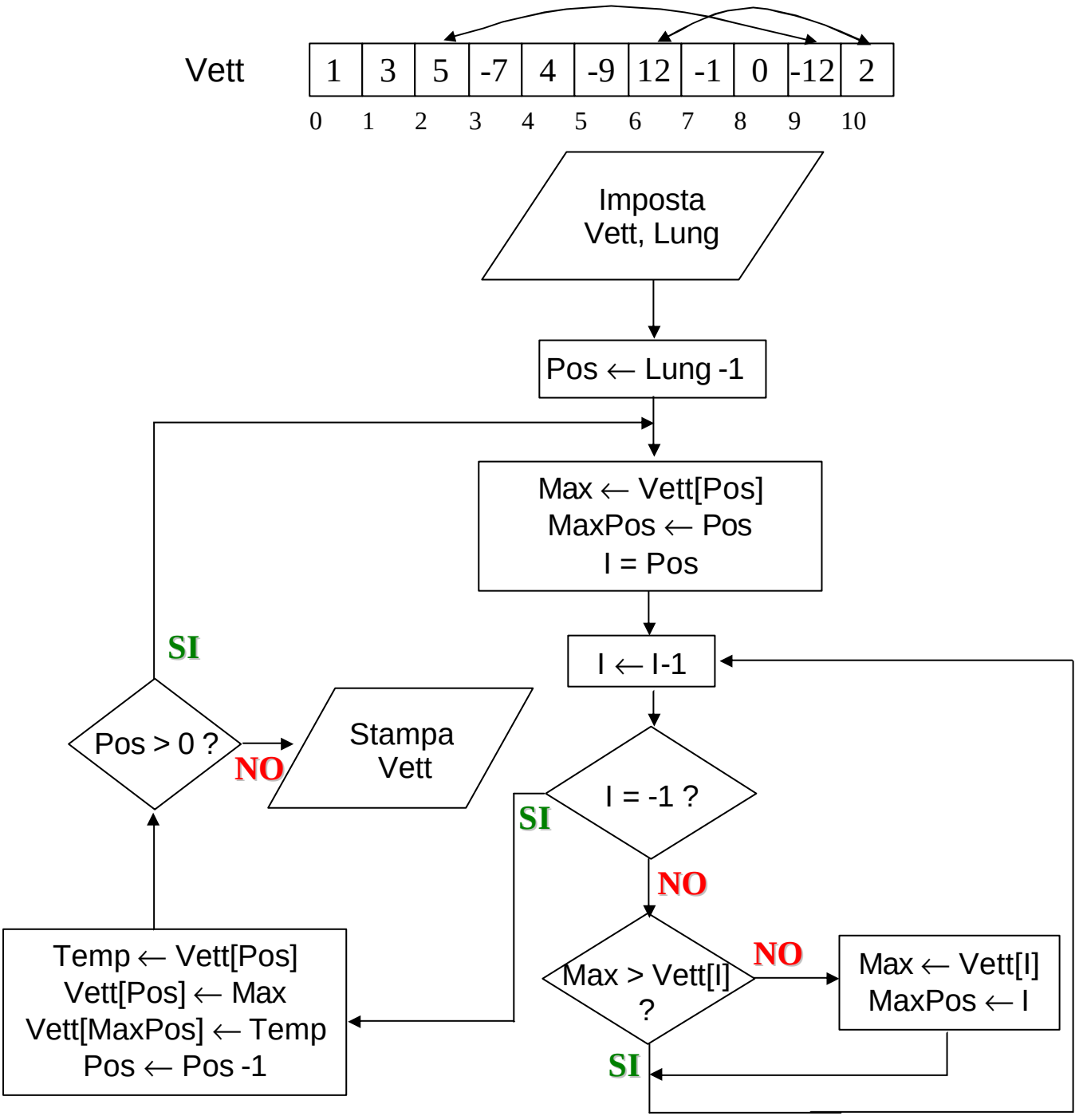
Esercizio VI

Parità di un vettore di byte assumendo che il vettore contenga sempre almeno un elemento



Esercizio VII

Ordinamento "ingenuo" di un vettore

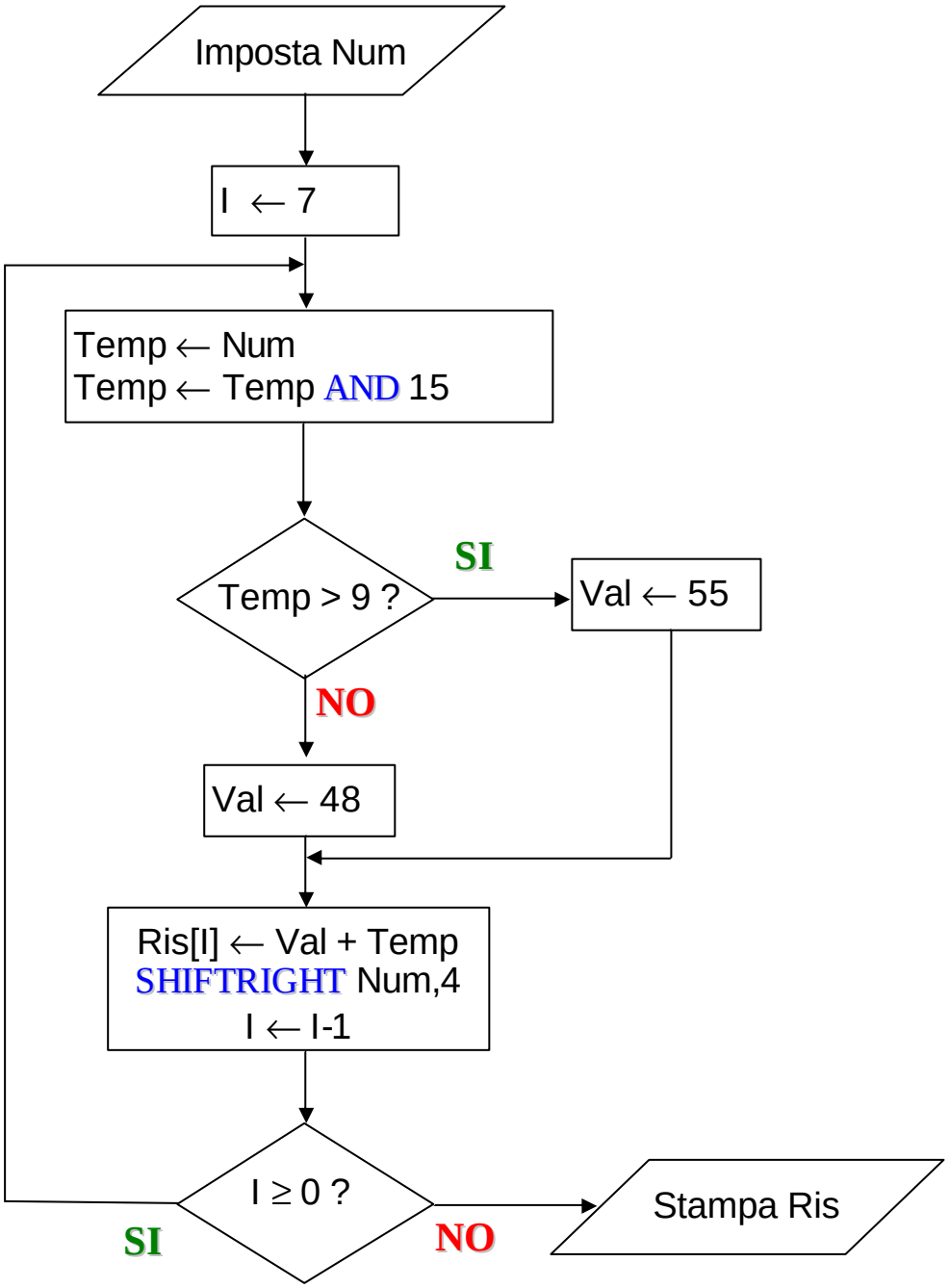


Esercizio VIII

Conversione di un numero binario a 32 bit in esadecimale (codifica mediante stringa)

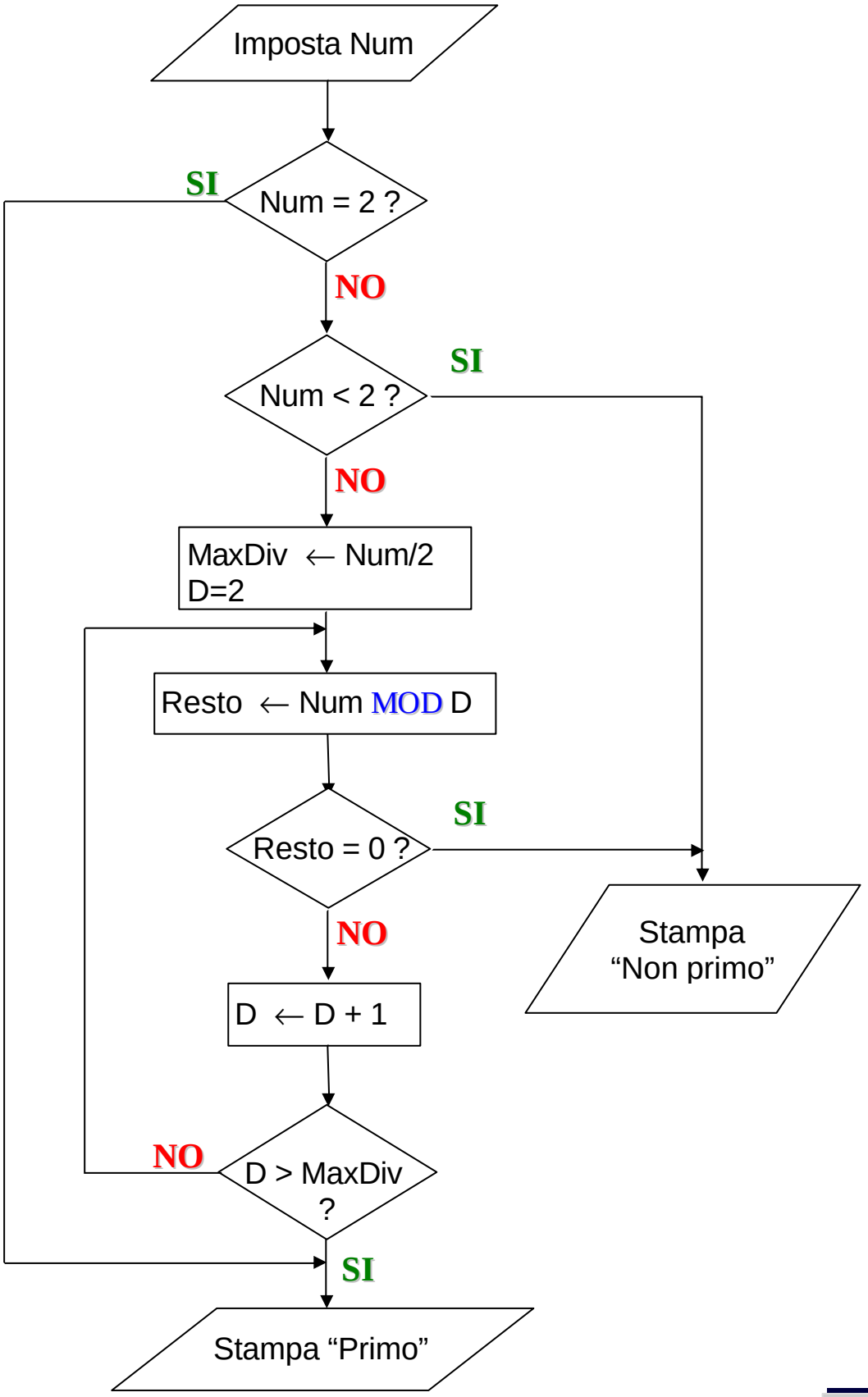
0...01100111100101001=…1100 1111 0010 1001 =

0	0	0	0	C	F	2	9
0	1	2	3	4	5	6	7



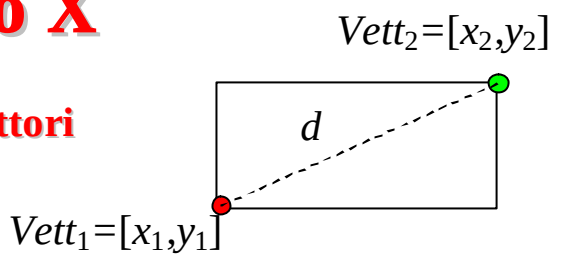
Esercizio IX

Determinare se un numero è primo

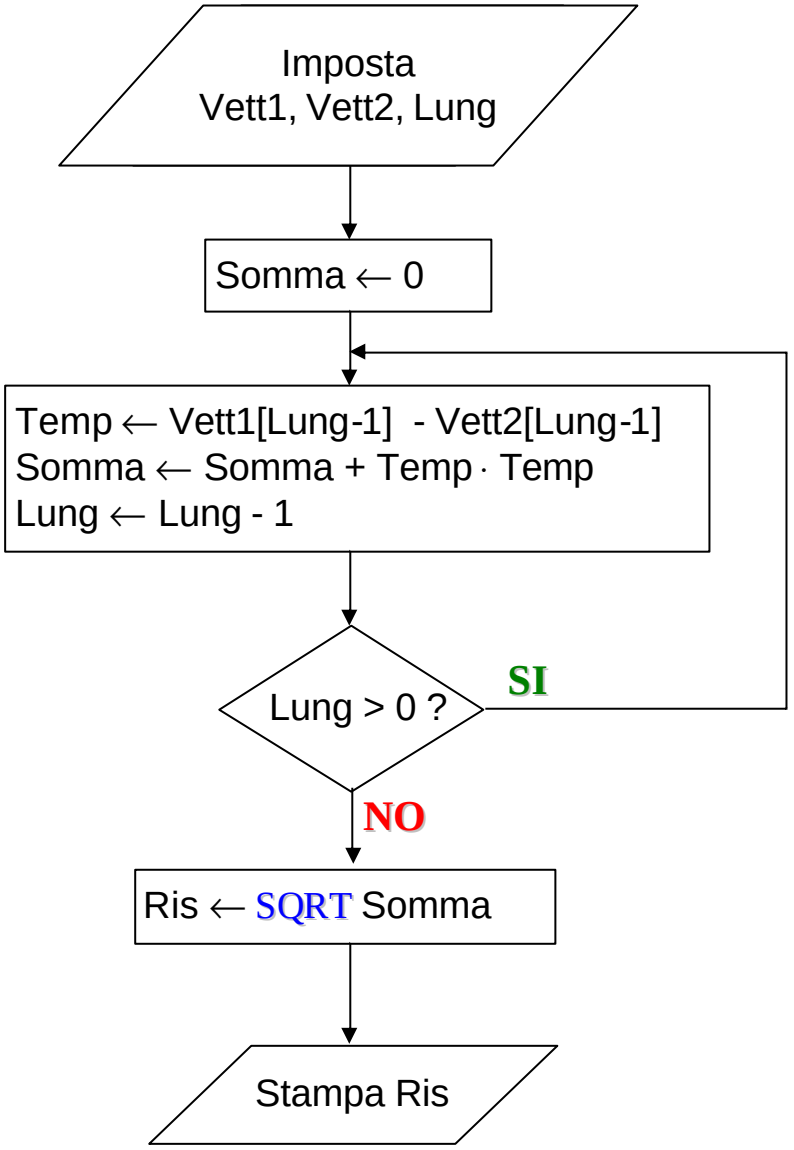


Esercizio X

Calcolo della distanza euclidea tra due vettori



$$d = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$$



ATTENZIONE: Richiede l'utilizzo del coprocessore matematico