

SWITCH

INPUT a, b, op (int)

op: 1)

+

2)

-

3)

*

4)

/

if (op == 1) {
 $Ans = a + b;$

}
else if (op == 2) {
 $Ans = a - b;$
}

```
if (op == 1) {
```

```
    R1S = a + b;
```

```
} else if (op == 2) {
```

```
    R1S = a - b;
```

```
} else if (op == 3) {
```

```
    R1S = a * b;
```

```
}
```

```
else if (op == 4) {
```

```
    R1S = a / b;
```

```
} else {
```

~~SWITCH~~

\Rightarrow

```
switch (op) {
```

```
    case 1:
```

```
        R1S = a + b;
```

```
        break;
```

```
    case 2:
```

```
        R1S = a - b;
```

```
        break;
```

```
    case 3:
```

```
        R1S = a * b;
```

```
        break;
```

```
    case 4:
```

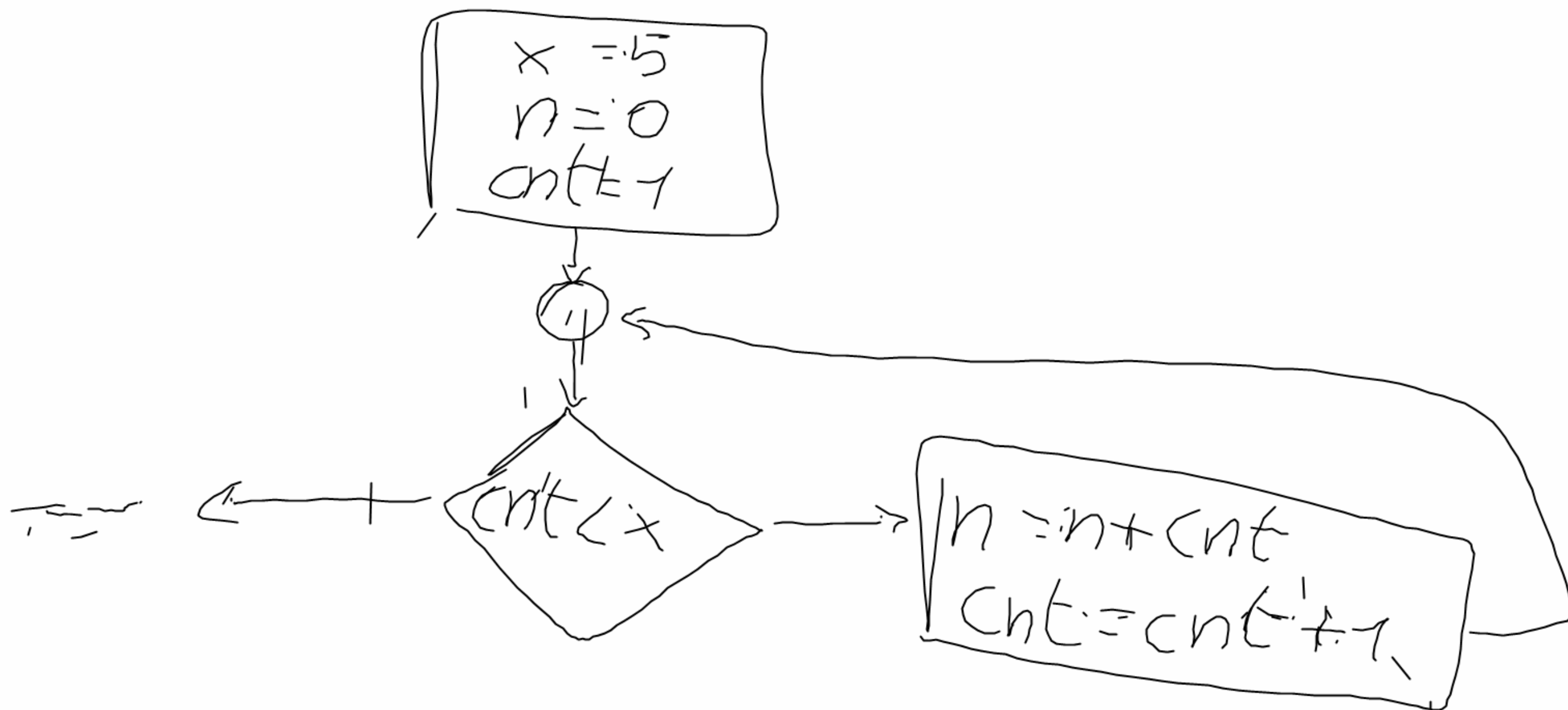
```
        R1S = a / b;
```

```
        break;
```

```
    default:
```

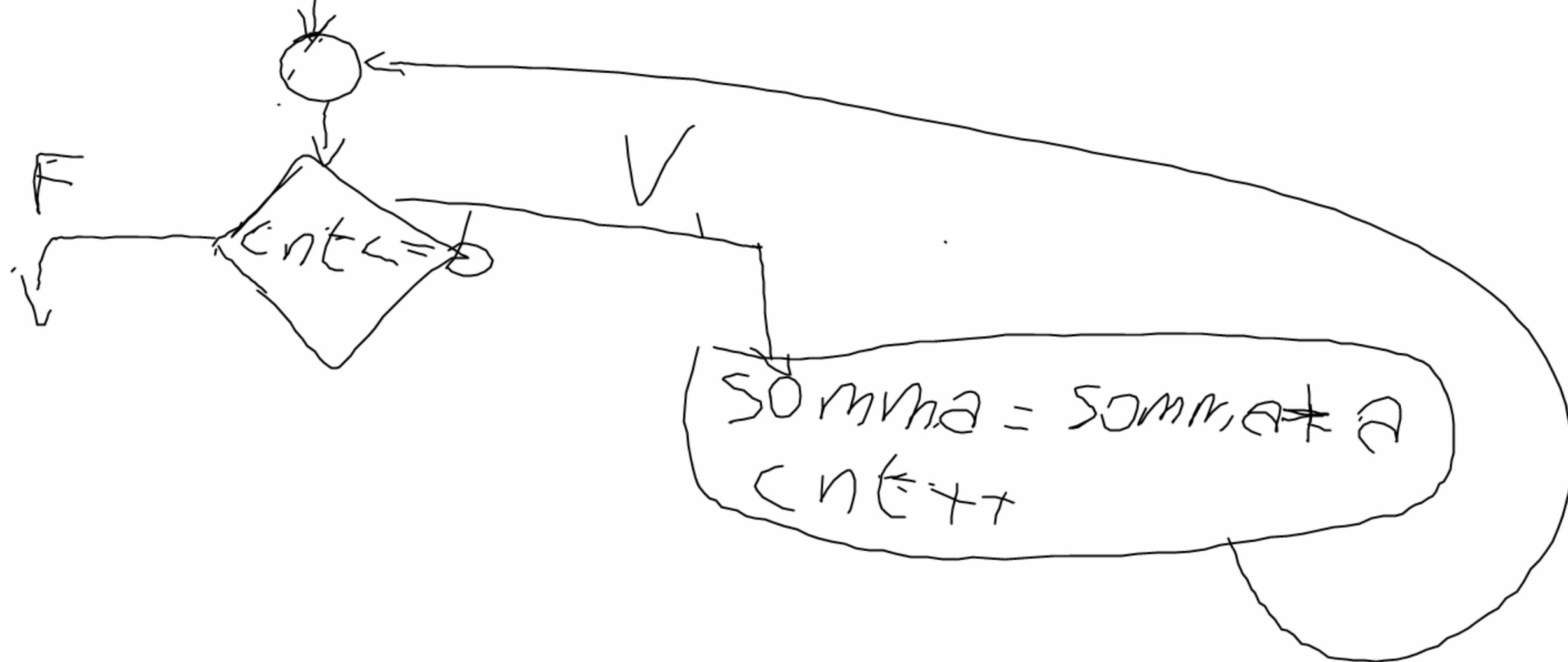
```
        ;
```

CICLO CON CONTROLLO IN TESTA



$cnt = 1; a = 2$
 $b = 3$
 $somma = 0$

$$2 + 2 + 2 = 6$$
$$\underbrace{a + a + a + \dots + a}_b$$



INPUT: n

OUTPUT: $n + (n-1) + (n-2) + \dots + 1 + \cancel{0}$

~~ES~~ $n = 5 \rightarrow 5 + 4 + 3 + 2 + 1 + \cancel{0}$
 \downarrow
 $= 15$

ES FATTORIALE

$$\begin{cases} n! = n \cdot (n-1) \cdot (n-2) \cdot \dots \cdot 1 \\ 0! = 1 \end{cases}$$

$$SE\ n=5 \rightarrow 5! = 5 \cdot 4 \cdot 3 \cdot 2 \cdot 1 = 120$$

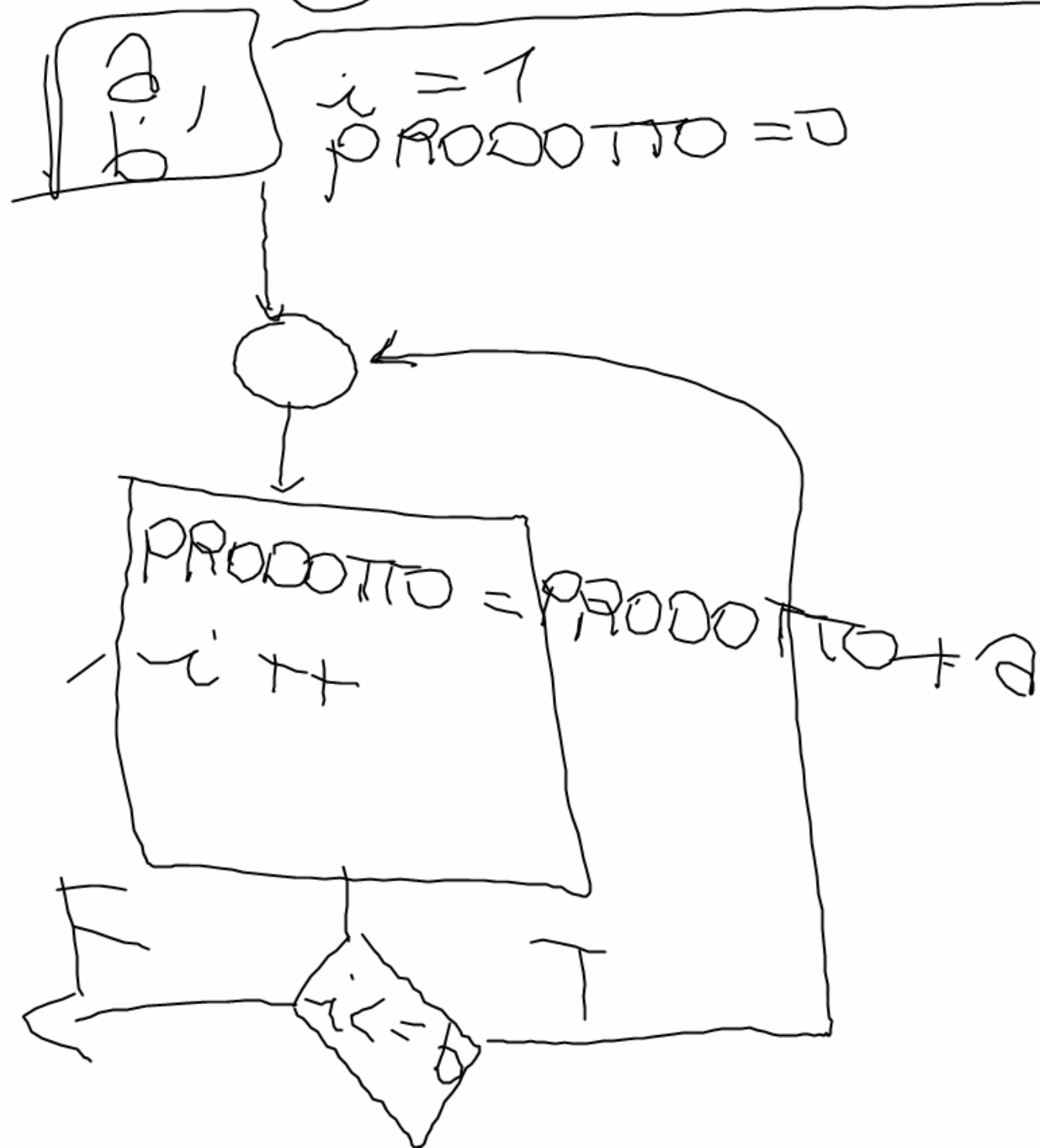
VAR

$n \leftarrow \text{INPUT}$

FATT = 1

WHILE

CONTROLLO IN CODA



W.HILE

```
int cnt = 1;
```

```
int a, b, somma = 0;
```

INPUT

```
[ // INPUT a e b
```

```
while ( cnt <= b ) {  
    somma = somma + a;  
    cnt = cnt + 1;  
}
```

while (condizione) {

... codice ...

}

W.HILE

```
int cnt = 1;
```

```
int a, b, somma = 0;
```

INPUT

```
[ // INPUT a e b
```

```
while ( cnt <= b ) {  
    somma = somma + a;  
    cnt = cnt + 1;  
}
```

while (condizione) {

... codice ...

}

\bullet $\text{num} > 10$ OPPURE $\text{num} < 50$
 \bullet PARI
 \bullet DIV

$(\text{num} > 10 \parallel \text{num} < 50)$
 OR

• $10 < \text{NUM} < 50$

• DISPARI

• DIV PER 10

$(\text{NUM} > 10 \text{ AND } \text{NUM} < 50)$

