

While Loop :-

```
for(int i=1  $\rightarrow$  50) {  
    Sout(i)  
}
```

int i=1;

while ( condition ) {

i → int i = 2;

while ( i  $\leq$  50 ) {

Sout(i);

i = i + 1;

// Work

// updation

Sout(i)

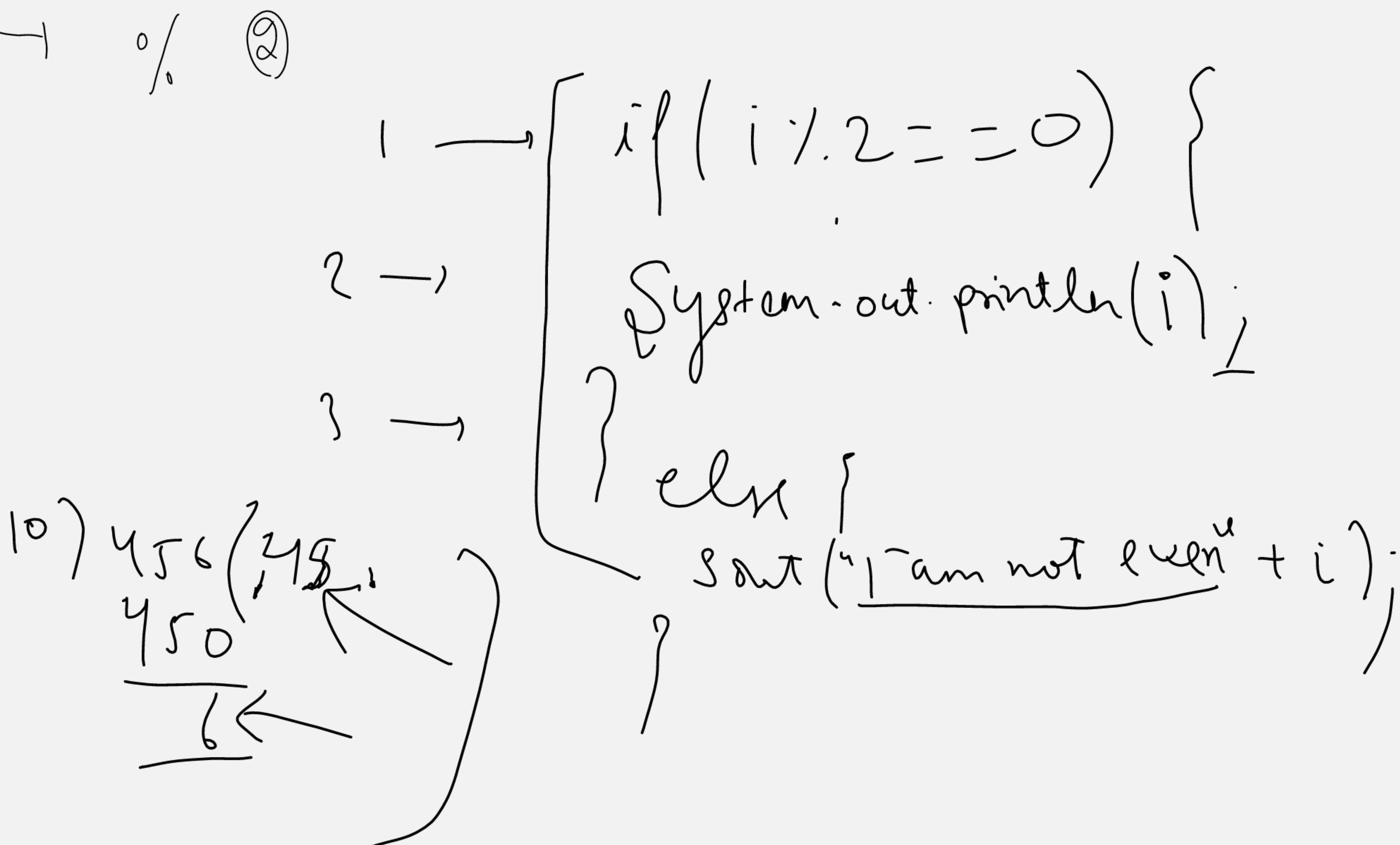
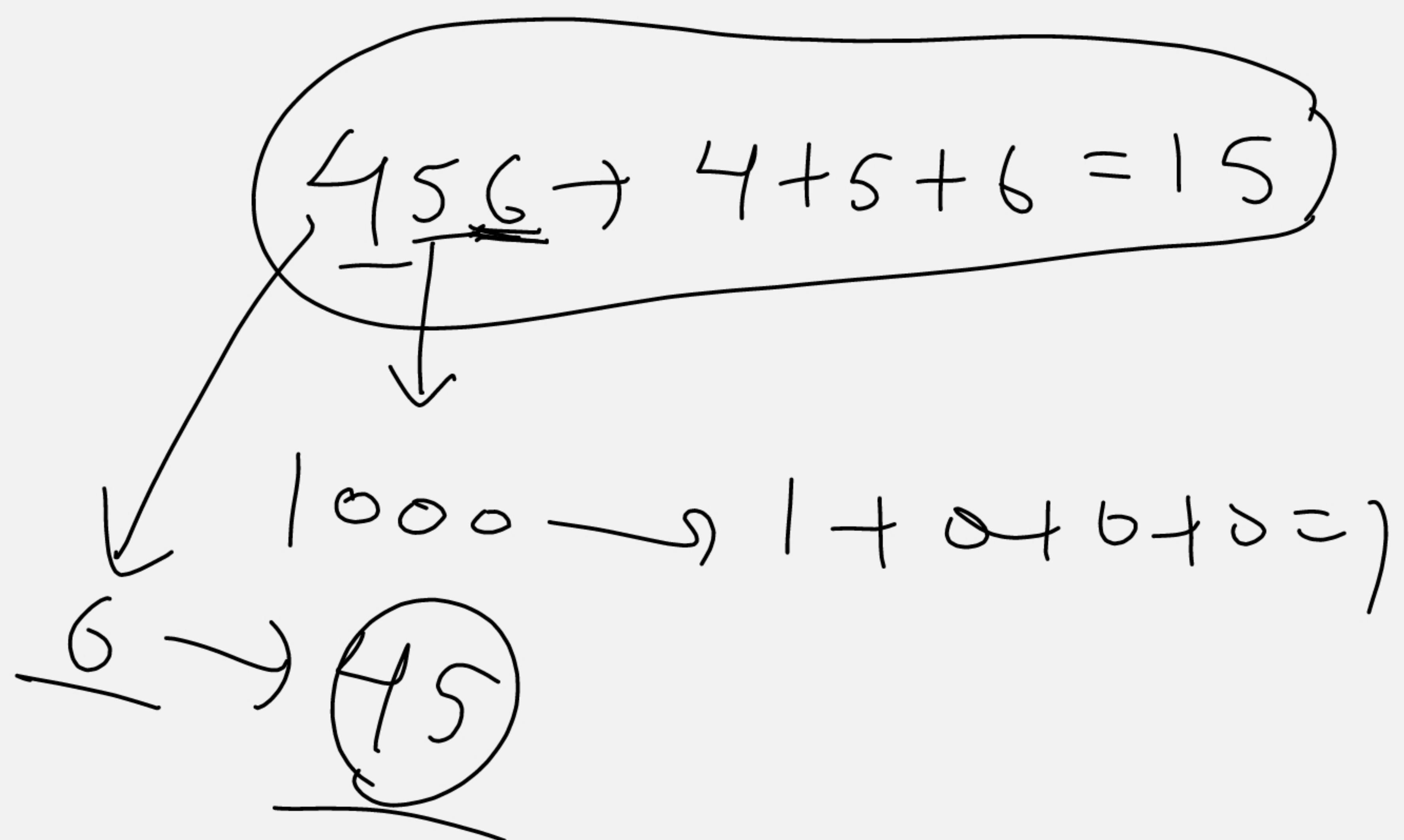
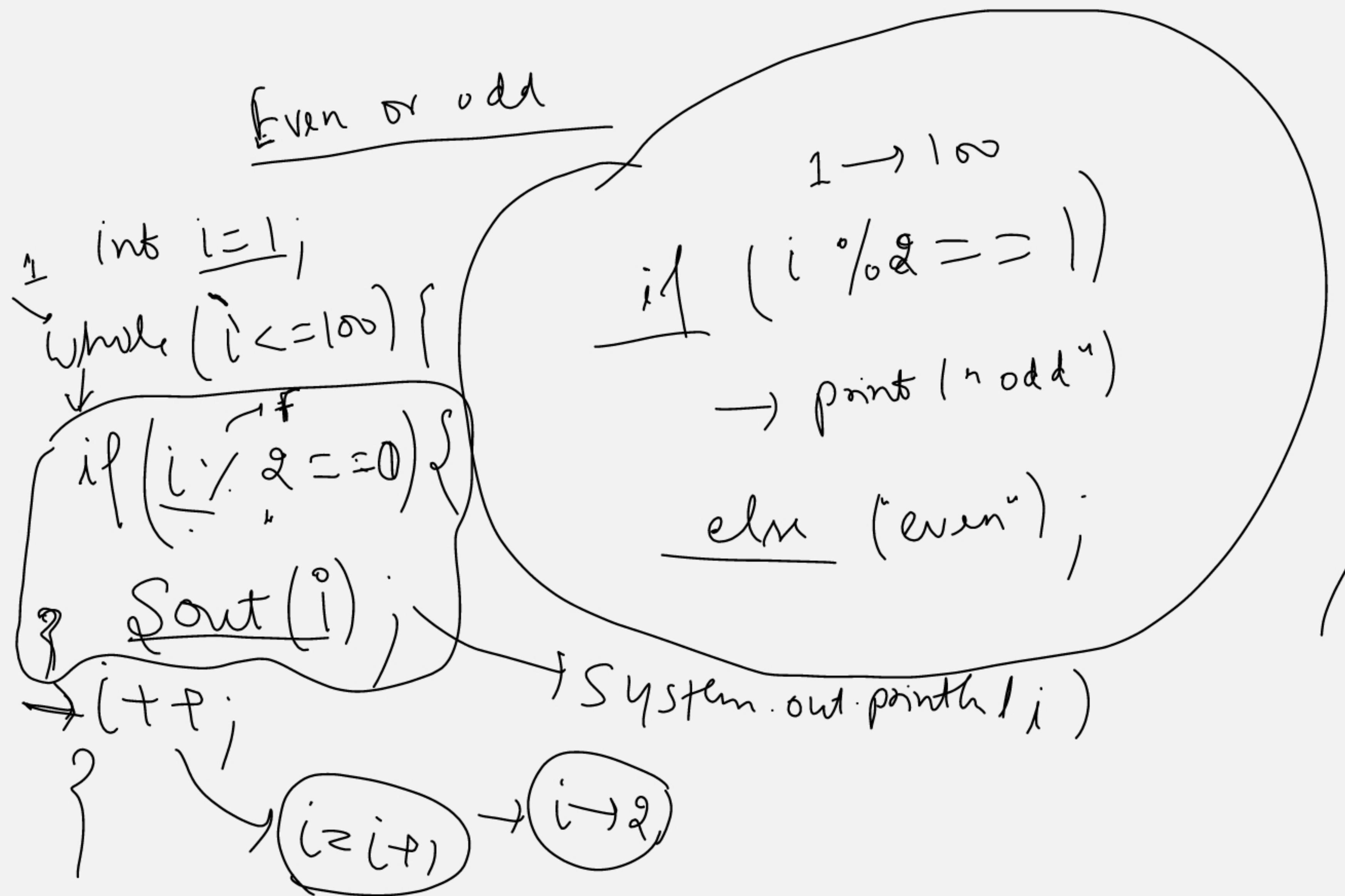
0 → even

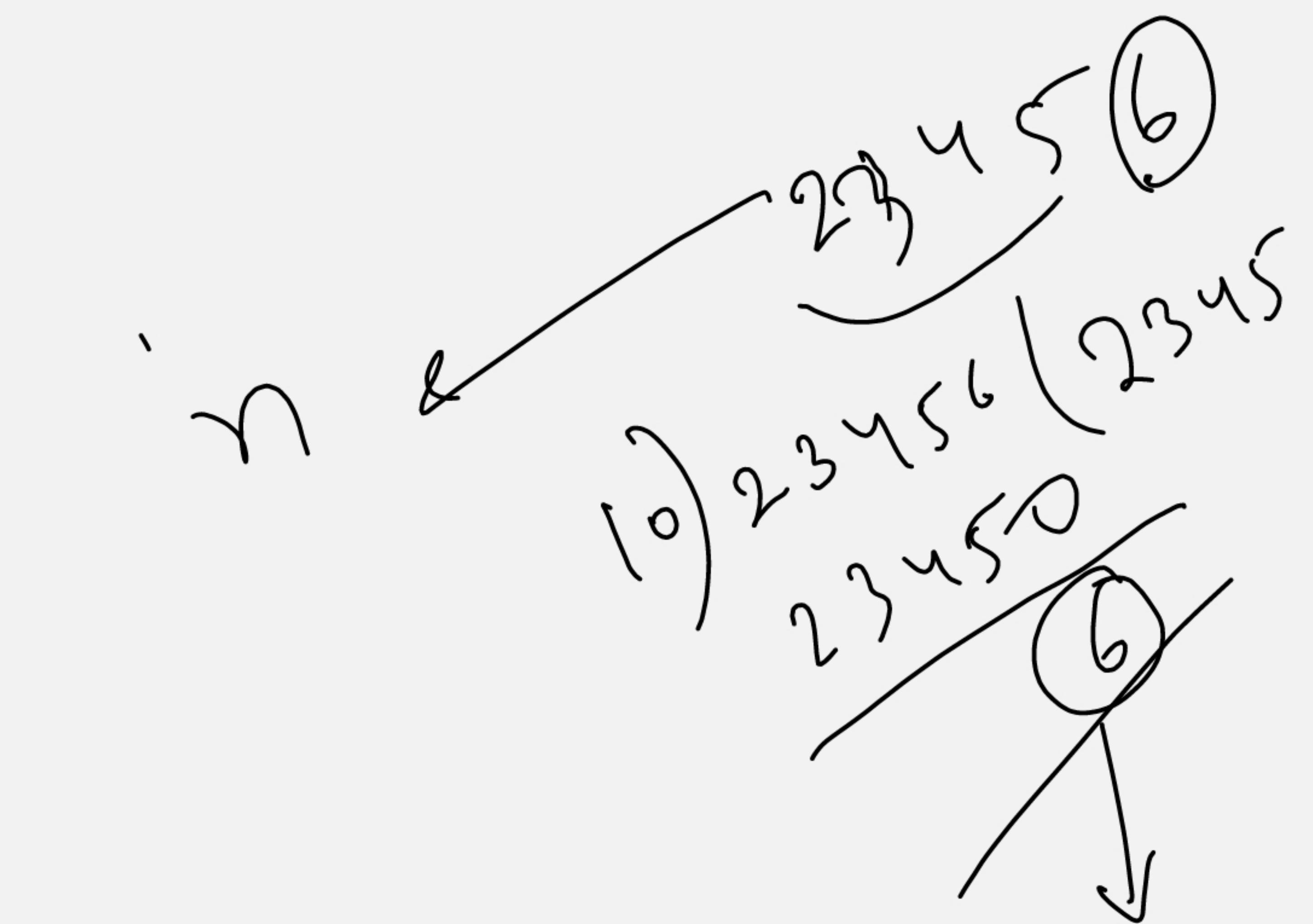
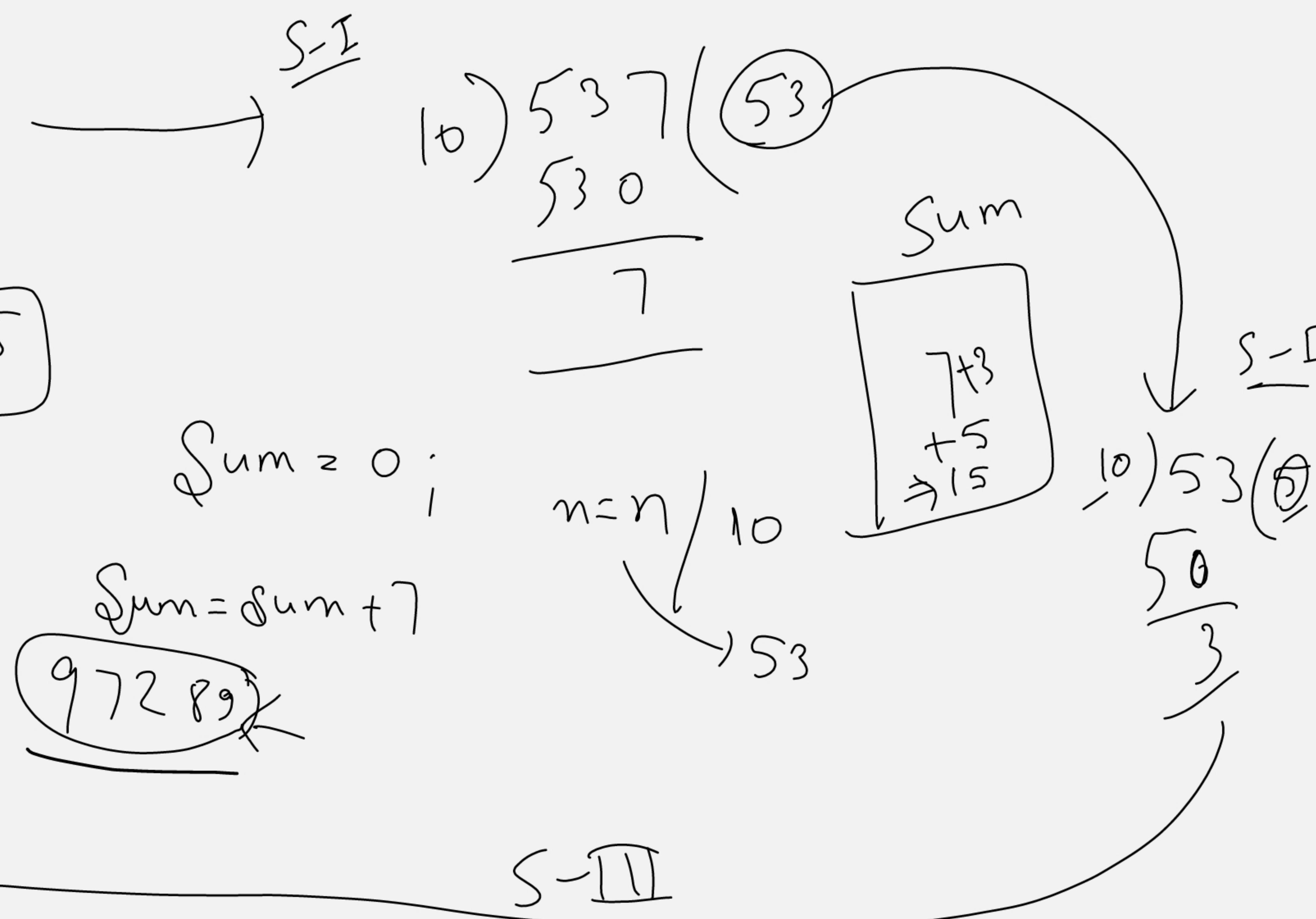
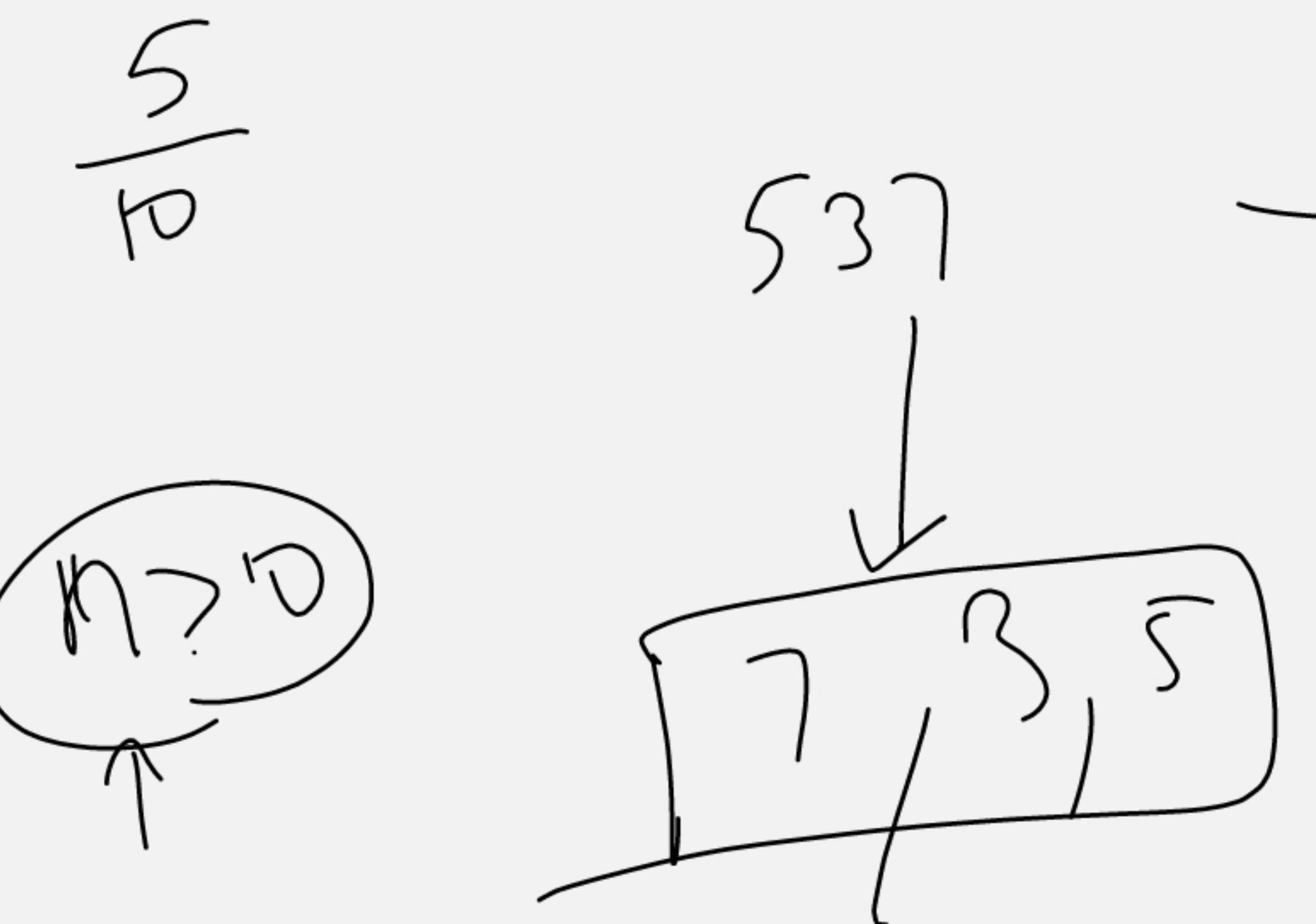
1 → 50

condition T  $\rightarrow$  loop runs  
otherwise F  $\rightarrow$  loop stops

15 → 0 → even  
11

2) 44(22  
44  
—  
1





$(n = n / 10)$

$$\begin{array}{r} 97:2 \\ - 10 \\ \hline \end{array}$$

$(972 \underline{89})$

$$\begin{array}{r} 10) 972 \underline{89} (\underline{9}) \\ 90 \\ \hline 72 \\ 72 \\ \hline 0 \end{array}$$

$n = 0$

$Sum$

$a^n$

$\cancel{10}$

S-I

$$n = \frac{97289}{10} = 9728$$

$n = -N$

R

9

S

9

$s = s + r$

S-II

$$\underline{n = \frac{9728}{10}} = 972$$

8

$$9+8=17$$

S-III

$$\underline{n = \frac{972}{10}} = 97$$

2

$$17+2=19$$

S-IV

$$\underline{n = \frac{97}{10}} = 9$$

7

$$19+7=26$$

S-V

$$\underline{n = \frac{9}{10}} = 0$$

9

$$26+9=35$$

int sum=0;

int digit = n%10;

sum = sum + digit;

1 →  $n = n/10;$

2 →  $\text{cout}(sum);$

int n = 97289;

int sum=0;

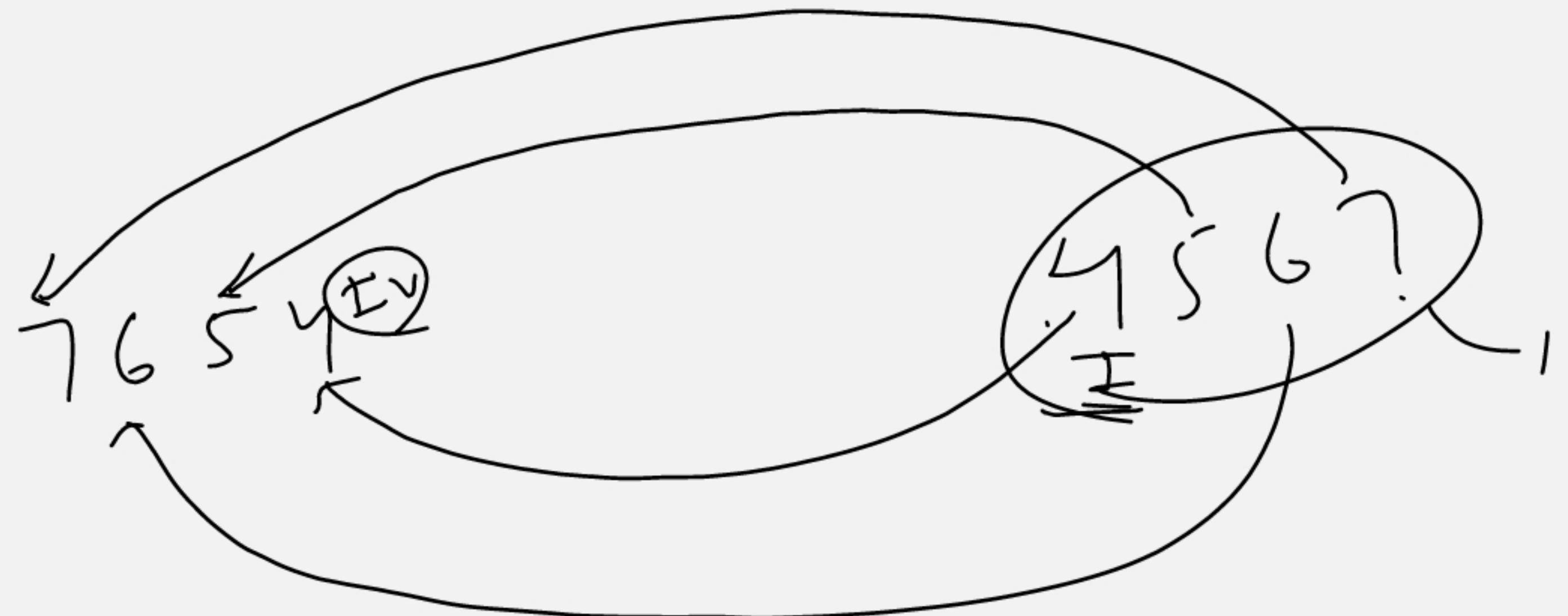
while (n>0) {

int digit = n%10;

sum = sum + digit;

1 →  $n = n/10;$

2 →  $\text{cout}(sum);$



$$S-I \quad \frac{4567}{10} = \underline{456}, \underline{7}$$

$$S-II \quad \frac{456}{10} = \underline{45}, \underline{6}$$

$$S-III \quad \frac{45}{10} = \underline{4}, \underline{5}$$

$$S-IV \quad \frac{4}{10} = \underline{0}, \underline{4}$$

97487

$rev = 0$

$$rev = rev * 10 + digit$$

$$\leftarrow rev = 0 * 10 + 7$$

$$\leftarrow rev = 7 * 10 + 6$$

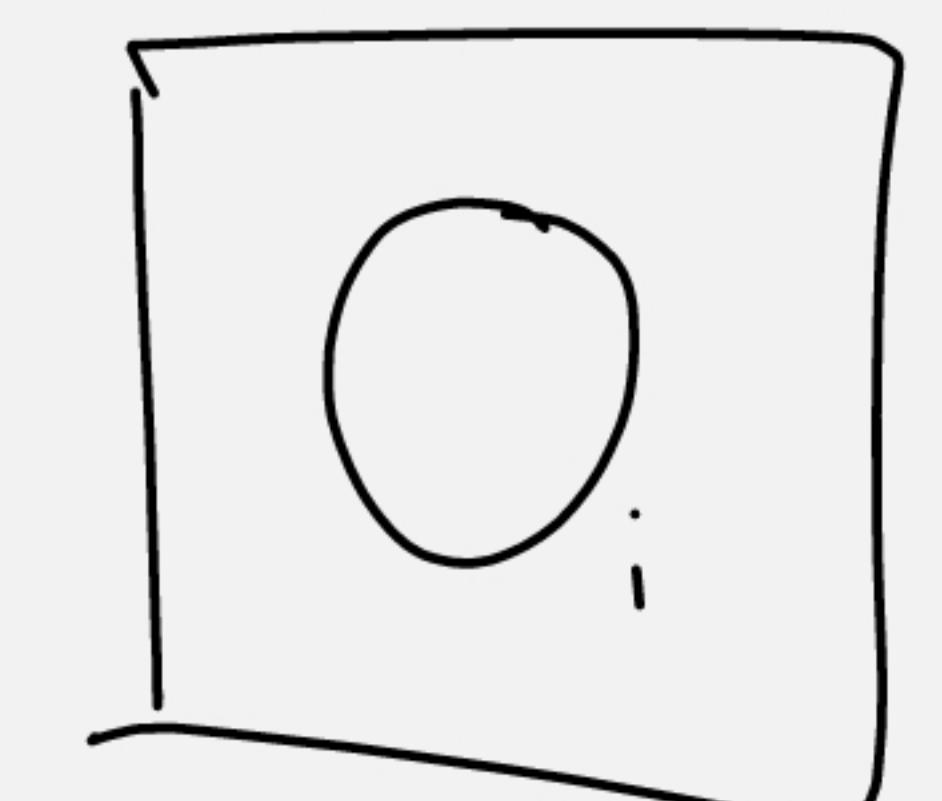
$$S-II \rightarrow 76 * 10 + 5 = 765$$

$$S-III \rightarrow 765 * 10 + 4 = 7654$$

rev  
while (c != '\n')  
int rev = ...

S-2	(97487)	R
	$\frac{97487}{10} = 9748$	7
S-3	$\frac{9748}{10} = 974$	8
S-4	$\frac{974}{10} = 97$	4
S-5	$\frac{97}{10} = 9$	7
S-6	$\frac{9}{10} = 0$	9

$$rev = \emptyset 7$$



rev

```

int num = 97487;
int rev = 0;

while (num > 0) {
    int digit = num % 10;
    rev = rev * 10 + digit;
    num = num / 10;
}

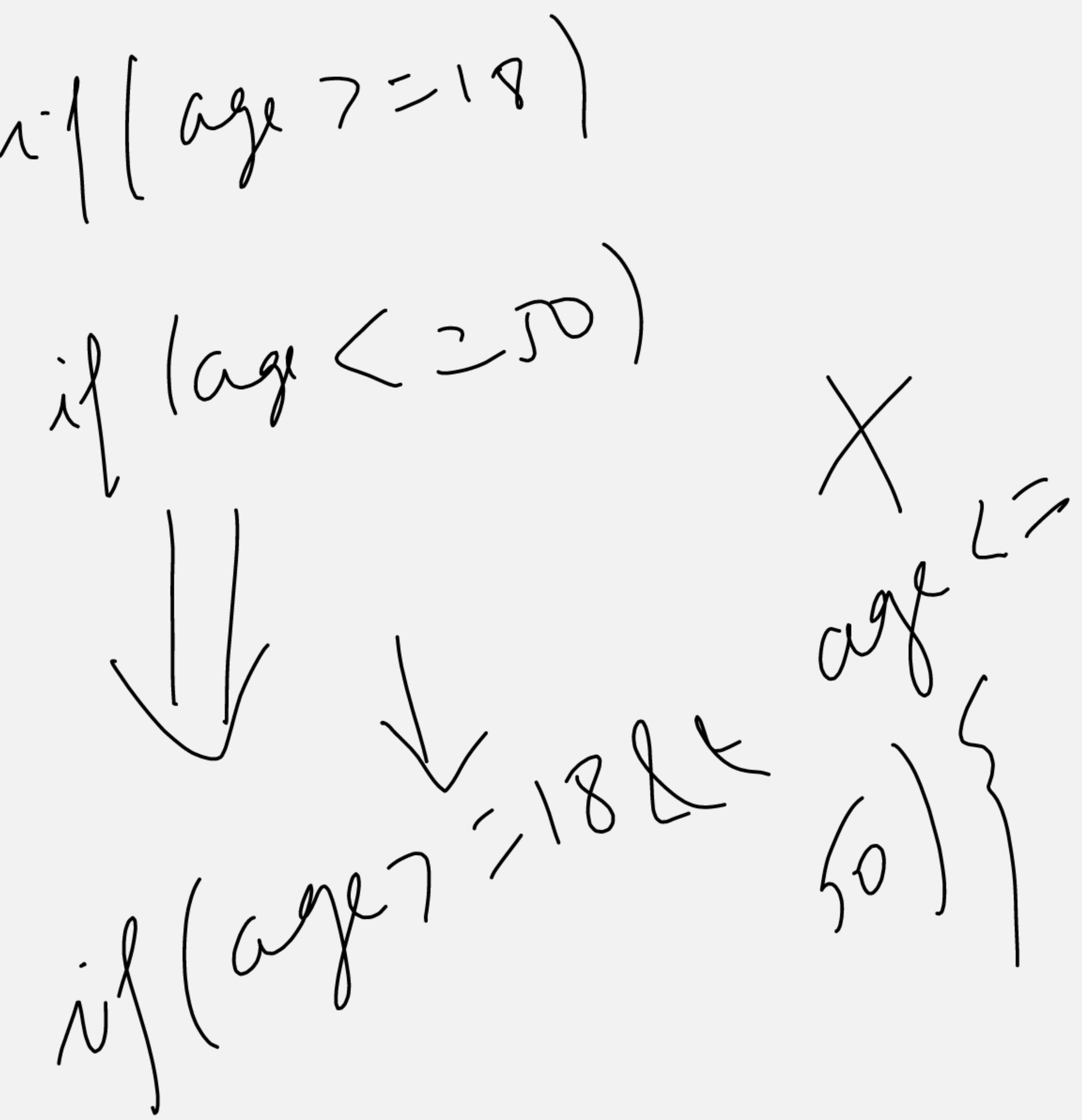
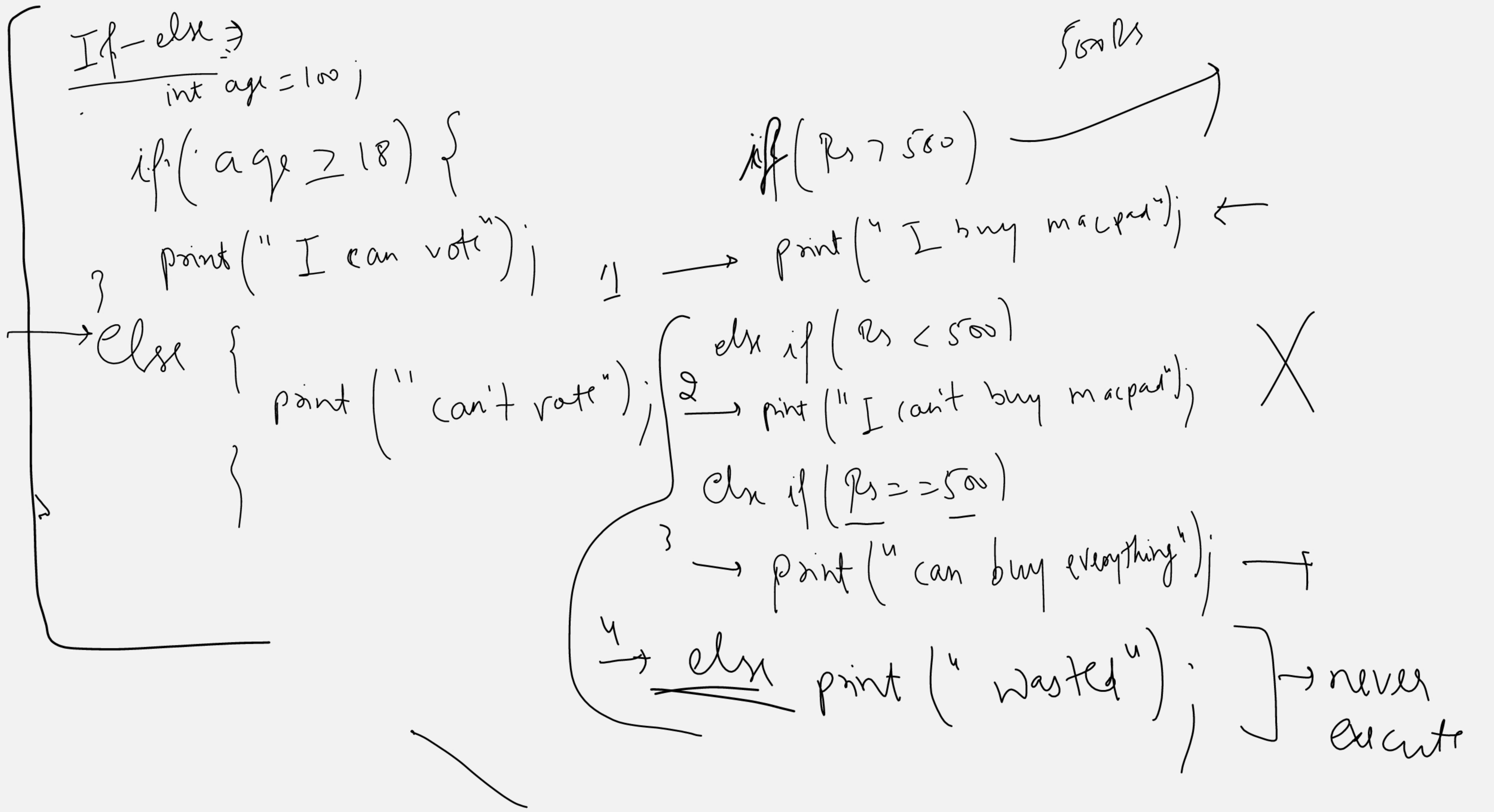
System.out.println(rev);
    
```

905{?}

(digit = 8)

rev = 9  
num = 78  
9748)

25870 → H.W.  
Dry Run  
(rev = 0)



Conditions	Prize	Code
$300 \leq n \leq 400$	Machork	if ( $n >= 300 \& n <= 400$ ) { Sout ("Machork");}
$200 \leq n \leq 280$	Kusum	? else if ( $n >= 200 \& n <= 280$ ) Sout ("Kusum");
$1100 \leq n \leq 1500$	Cycle	else if ( $n = 1100 \& n <= 1500$ ) Sout ("cycle");
$50 < n \leq 80$	Bike	else if ( $n > 50 \& n <= 80$ ) Sout ("Bike");
Otherwise	BLNT	else Sout ("BLNT");