// n = 2348

n%10 → (2348)%10 → 8 {We will only get last digit}

n%100 → (2348)%100 → 48 {We won't get it's one digit}

n	n%10	
2348	8	n = n/10 = 2348/10 → 234
234	4	n = n/10 = 234/10 → 23
23	3	n = n/10 = (23)/10 → 2
2	2	n = n/10 = (2)/10 → 0
0 {we are done}		

// n = 356

n	SOP(n%10)	
356	6	n = n/10, n = 35
35	5	n = n/10, n = 3
3	3	n = n/10, n = 0
0	Break	

// Read n;

```
while( n != 0 ){
    SOP(n%10)
    n = n/10
}
```

SOP(n%10)

n = 0 :	0	n = n/10	n = 0
n = 0 :	0	n = n/10	n = 0
n = 0 :	0	n = n/10	n = 0
⋮			

Infinite loop

{Time limit Exceded Error}

// Given n & single digit d, add d at the back of n

Number n	d	(n, after adding d at back of n)	n * 10 + d → (n)(10) + d
234	2	2342 → (234)(10) + 2	
432	5	4325 → (432)(10) + 5	
2368	0	23680 → (2368)(10) + 0	
120	7	1207 → (120)(10) + 7	
0	9	9 → (0)(10) + 9	

N = 2346 , rev = 0

```
d = n % 10 {6}
n = n/10   {234}
// Can we add d to the back of rev
rev = rev*10 + d {6}
```

n = 234
rev = 6

```
d = n % 10 {4}
n = n/10   {23}
rev = rev*10 + d {64}
```

n = 23
rev = 64

```
d = n % 10 {3}
n = n/10   {2}
rev = rev*10 + d {643}
```

n = 2
rev = 643

```
d = n % 10 {2}
n = n/10   {0}
rev = rev*10 + d {6432}
```

n = 0 → rev completed stop loop

rev = 6432 → rev of N

Jal → water → while()

Pani → water → for()

// While loop :

```
initialization;
while(condition){
    // Statements
    update
}
```

for

```
for( initialization ; condition ; update ){
    // statements
}
```

don't forget

don't forget

// print all numbers from 1 to 10

```
for( int i = 1 ; i <= 10 ; i = i+1 ) {
    SOP(i);
}
```