



Q

Swap x and y

✓ x = 99
y = 67

int ✓ c = x;
x = y;
y = c; ✓

x = 67 ✓
y = 99 ✓

c = 99	✓
y = 67	99
x = 99	67 ✓

sys(x and y) = 67 & 99

```
public static void main(String[] args) {  
  
    Scanner scn = new Scanner(System.in);  
    int x = scn.nextInt();  
    int y = scn.nextInt();  
    swap(x,y);  
    System.out.println("x = " + x);  
    System.out.println("y = " + y);  
  
}
```

```
public static void swap(int x, int y){  
  
    System.out.println("x = " + x);  
    System.out.println("y = " + y);  
    int c = x;  
    x=y;  
    y=c;  
    System.out.println("x = " + x);  
    System.out.println("y = " + y);  
    return;  
}
```

Q

Take in three integer inputs x, y and z. Assign the value of x to y, y to z, z to x. Then print the value of x, y, z in separate lines.

x = 10
y = 20
z = 30

x = 30 ✓
y = 10
z = 20

int temp = x; 10

x = z; 30

z = y; 20

y = temp; 10

30
10
20

```
public class Solution {

    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        int x = scn.nextInt(); 10
        int y = scn.nextInt(); 20
        int z = scn.nextInt(); 30

        ✓ swap(x,y,z);
    }

    public static void swap(int x , int y , int z){
        ✓ int temp = x;
        ✓ x = z;
        z = y;
        y = temp;
        System.out.println(x);
        System.out.println(y);
        System.out.println(z);
    }
}
```

30
10
20

Swap
main

30
10
20

$$\left[\begin{array}{l} \text{int temp} = x; \\ x = y; \\ y = \text{temp}; \end{array} \right]$$

$$\left[\begin{array}{l} \text{swap} \checkmark x = 10 \\ \checkmark y = 20 \end{array} \right]$$
 without using third variable

$$\begin{array}{l} \checkmark x = x + y \\ \checkmark y = x - y \\ \checkmark x = x - y; \end{array}$$

$$x = \cancel{22} \quad y = \cancel{19} \quad 3$$

$$19 \leftarrow$$

Ques $\checkmark x = (11)$
 $y = (22)$

$x = 3$
 $y = (34)$

$$\left[x \times 10 + y \right] = \boxed{xy}$$

$$3 \times 10 + 4$$

$$30 + 4 = 34$$

Q

Given a three-digit positive number. Print its digits one by one starting from the digit at one's place to the digit at hundred's place in a separate line.

$x = 345$
 $\begin{array}{l} \rightarrow 1's \\ \rightarrow 10's \\ \rightarrow 100's \end{array}$

5
4
3

$$\underline{879/10 = 87}$$

```
import java.io.*;
import java.util.*;
```

```
public class Solution {
```

```
    public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        ✓ int n = scn.nextInt();
```

```
        ✓ while(n>0){
            ✓ int rem = n%10;
            ✓ System.out.println(rem);

            ✓ n = n/10;
```

```
        }
        /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your
```

```
    }
```

rem = 8
 $n = 879$

$$879/10 = 87$$

9
7
8

$$87/10 = 8$$

10 | 879 | 87 → /
 $\begin{array}{r} 80 \\ \times 79 \\ \hline 720 \\ 720 \\ \hline 879 \end{array}$

$$8/10 = 0$$

Q Reverse 3 digit #

$n =$ 

✓ $\eta = 87 \textcircled{9}$

ans = 0 ✓

while ($n > 0$) {

put rem = $n\% - 10$

$$\text{ans} = \underline{\text{ans}} * \underline{10} + \underline{\text{rem}}$$
$$\underline{n = n / 10^9}$$
$$n = \cancel{8} \cancel{7} \cancel{8}$$
$$gem = 978$$

ans = ~~9~~ ~~9~~ ~~97~~ 978

$$\begin{array}{r} 10 \\ 3 \\ \hline 13 \end{array}$$
$$\begin{array}{r} 30 \\ 4 \\ \hline 34 \end{array}$$
$$3 \times 10 + 4$$
$$\begin{array}{r} 90 \\ 7 \\ \hline 97 \end{array}$$
$$\begin{array}{r} 970 \\ 8 \\ \hline 978 \end{array}$$

```
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    int test = scn.nextInt();
}
```

```
while(test>0){
    int n = scn.nextInt();
    reverse(n);
}
```

```
test--;
```

3

```
/* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class
```

```
public static void reverse(int n){
    int rev = 0;
    while(n>0){
        int rem = n%10;
        rev = rev*10 + rem;

        n = n/10;
    }
    System.out.println(rev);
}
```

$$\begin{array}{r} 2 \\ - 123 \\ - 879 \end{array}$$

321
978