

Ques Swap x and y

```
public static void swap(int x, int y) {
    int c = 0;
    c = x; // first step ✓
    System.out.println("c = " + c);

    x = y; // second step ✓
    System.out.println("x = " + x);

    y = c; // third step ✓
    System.out.println("y = " + y);

    System.out.println("x = " + x);

    System.out.println("y = " + y);
}
```

e.g.,  $x = 10$   
 $y = 20$

dry run

$c = \cancel{0} 10$   
 $\boxed{x = 20}$   
 $\boxed{y = 10}$

main

$\boxed{x = 8}, \boxed{y = 3}, \boxed{z = 4}$   
 $\underline{\underline{xyz = 834}} \text{ (int)}$   
 $\text{ans} \Rightarrow 8 \times 100 + 3 \times 10 + 4$   

$$\begin{array}{r} 800 \\ 30 \\ + 4 \\ \hline 834 \end{array}$$

Ques make xy from x & y

```
public static int solve(int x, int y) {
    int ans = x * 10 + y;
    return ans;
}
```

e.g.,  $x = \underline{8}$   
 $y = 5$

$\underline{\underline{85}}$   
 $\uparrow \uparrow$   
 $x \ y$

$\boxed{x * 10} \Rightarrow 8 * 10 \Rightarrow 80$

$\boxed{y} \Rightarrow 5$

$\text{ans} = \underline{\underline{x * 10}} + \underline{\underline{y}}$   
 $= 80 + 5$   
 $= 85$

Ques Print all digits

```
public static void solve(int n) {  
    while (n > 0) {  
        int rem = n % 10;  
        System.out.println(rem);  
        n = n / 10;  
    }  
}
```

console

9

4

8

$$n = \underline{\underline{849}} > 0$$

$$\begin{aligned} \text{rem} &= n \% 10 = 849 \% 10 = 9 \\ n &= 849 / 10 \Rightarrow \underline{\underline{84}} > 0 \end{aligned}$$

$$\begin{aligned} \text{rem} &\Rightarrow n \% 10 \Rightarrow 84 \% 10 \Rightarrow 4 \\ n &\Rightarrow n / 10 \Rightarrow 84 / 10 \Rightarrow \underline{\underline{8}} > 0 \end{aligned}$$

$$\begin{aligned} \text{rem} &\Rightarrow n \% 10 \Rightarrow 8 \% 10 \Rightarrow \underline{\underline{8}} \\ n &= n / 10 \Rightarrow 8 / 10 \Rightarrow \underline{\underline{0}} > 0 \end{aligned}$$

# Ques Reverse a 3 digit no.

$$\underline{\text{num} = 946} \Rightarrow 649$$

Step 1)  $\underline{\text{int } a} = \text{num} \% 10 = 946 \% 10 = \underline{6}$   
 $\text{num} = \text{num} / 10; \quad // 94$   
 $\underline{\text{int } b} = \text{num} \% 10 \Rightarrow 94 \% 10 = \underline{4}$   
 $\text{num} = \text{num} / 10; \quad // 9$   
 $\underline{\text{int } c} = \text{num} \% 10 = 9 \% 10 = \underline{9}$

$$a = 6, b = 4, c = 9$$

Step 2)  $\Rightarrow a * 100 \Rightarrow 6 * 100 \Rightarrow \underline{600}$   
 $\Rightarrow b * 10 \Rightarrow 4 * 10 \Rightarrow \underline{40}$   
 $\Rightarrow c * 1 \Rightarrow 9 * 1 \Rightarrow \underline{9}$   
$$\begin{array}{r} 600 \\ + 40 \\ + 9 \\ \hline \underline{649} \end{array}$$

```
public static int solve(int n) {    // 945
    // step 1
    int a = n % 10; // 5
    n = n / 10;     // 94

    int b = n % 10; // 4
    n = n / 10;     // 9

    int c = n % 10; // 9

    // step 2

    int ans = a * 100 + b * 10 + c * 1;

    return ans;
}
```

HW

HW\_Print count of digits and digits line by line.

Success Rate: 100.00% Max Score: 10 Difficulty: Medium

Solve Challenge

Print the final number xyzw...

Success Rate: 100.00% Max Score: 10 Difficulty: Medium

Solve Challenge

Reverse n-digit number

Success Rate: 100.00% Max Score: 10 Difficulty: Medium

Solve Challenge