

Swap x y z

Problem

Submissions

Leaderboard

Discussions

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.

Sample Input 0

10
20
30
 $\begin{array}{l} z \rightarrow z \\ y \rightarrow z \\ z \rightarrow y \end{array}$

Input }
 $x = 10$
 $y = 20$
 ~~$z = 30$~~

Sample Output 0

30
10
20
 $\begin{array}{l} \checkmark \\ \checkmark \\ \checkmark \end{array}$

$temp = z;$ $temp = 30$
 $z = y;$ $z = 20$
 $y = x;$ $y = 10$
 $x = temp;$ $x = 30 \checkmark$

$x = 30$ } output
 $y = 10$
 $z = 20$

```
static void swap(int x, int y, int z){  
    int temp = z;  
    z = y;  
    y = x;  
    x = temp;  
    System.out.println(x) → 30 }  
    System.out.println(y) → 10 }  
    System.out.println(z) → 20 }  
}
```

```
public static void main(String[] args) {  
    /* Enter your code here. Read input from  
     Scanner scn = new Scanner(System.in);  
     int x = scn.nextInt();  
     int y = scn.nextInt();  
     int z = scn.nextInt();  
     swap(x, y, z);  
     ↑      ↑      ↑  
     10    20    30 }
```

Memozy

$x = 10$ 30
 $y = 20$ 10
 $z = 30$ 20
 $temp = 30$

Find GCD 3

greatest common
divisor

Problem

Submissions

Leaderboard

Discussions

Take two integer inputs x and y . Then print the gcd of these two numbers as an integer output.

Sample Input 0

100
35

$x = 100 \rightarrow 1, 2, 5, 10, 20, 25, 50, 100$
 $y = 35 \rightarrow 1, 5, 7, 35$.

Sample Output 0

5 ✓

$gcd = 1$
for ($i = 2$)
 if ($x \% i == 0 \& y \% i == 0$)
 $gcd = i$;

return gcd ; ✓

Main
int ans = gcd(x, y)
print(ans); ✓

Memory

```
static int gcd(int x, int y){  
    int gcd = 1;  
    for(int i = 2 ; i <= x && i <= y ; i++){  
        if(x % i == 0 && y % i == 0){  
            gcd = i;  
        }  
    }  
}
```

$x = 342$
 $y = 513$
 $gcd = 17$

```

        gcd = i;
    }
}
return gcd; → 17
}

```

```

public static void main(String[] args) {
    /* Enter your code here. Read input
    Scanner scn = new Scanner(System.in)
    int x = scn.nextInt(); 34
    int y = scn.nextInt(); 51
    int ans = gcd(x, y); 17
    System.out.println(ans);
}

```

~~gcd =~~

~~17~~

~~i = 284867894...17~~

Given x and y, print xy

| | | | |
|---------|-------------|-------------|-------------|
| Problem | Submissions | Leaderboard | Discussions |
|---------|-------------|-------------|-------------|

Take x and y digits as integer inputs and then form a number xy from it and then finally print that number.

for eg. if you are given 3 and 4, then you have to form the number 34 from it and then finally print the number 34. ✓

✓ $x \leftarrow$ input
✓ $y \leftarrow$ input

$$\begin{aligned}
 &\text{ten's} \downarrow \text{one's} \downarrow \\
 &\text{xy} \\
 &\xrightarrow{\quad} (x * 10 + y) \\
 &\xrightarrow{\quad} (x * 10 + y * 1) \\
 &\xrightarrow{\quad} (x * 100 + y * 10 + z) \\
 &\xrightarrow{\quad} 3 * 10 + 4 = 34
 \end{aligned}$$

```

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

```

```

public static void main(String[] ar.
    /* Enter your code here. Read i
    Scanner scn = new Scanner(Syste
    int x = scn.nextInt(); → 3
    int y = scn.nextInt(); → 9
    int result = x * 10 + y;
}

```

```

    int x = scn.nextInt(),
    int y = scn.nextInt(); → 9
    int result = x_y(x, y); ←
    System.out.println(result); → 39
}

```

Print digit by digit of a three digit number

Problem

Submissions

Leaderboard

Discussions

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.

Sample Input 0

345

Sample Output 0

5
4
3

Sample Input 1

while($n > 0$)
% → fetch
print →
/ → reduce

function

3 4 5

5
4
3

```

static void ThreeDigitNum(int n){
    while(n>0){ → 787>0
        int rem = n % 10; → 787
        System.out.println(rem); → 7
        n = n /10; → 787
    }
}

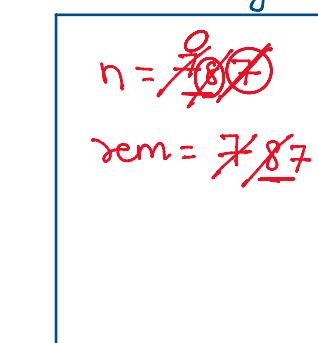
public static void main(String[] args) {
    /* Enter your code here. Read input from
    Scanner scn = new Scanner(System.in);
    int num = scn.nextInt(); → 787
    ThreeDigitNum(num);
}

```

Memory

~~n = 787~~
 rem = 7

$$\begin{array}{r}
 787 \\
 -70 \\
 \hline
 87 \\
 -80 \\
 \hline
 7
 \end{array}$$



Output

7
8
7

Reverse a 3 digit number

Sample Input 0



Problem

Submissions

Leaderboard

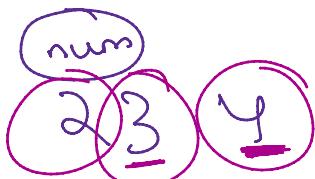
Sample Output 0



Sample Input 1

$$\begin{aligned} \text{sum} &= \cancel{\underline{4}} \cancel{\underline{3}} \\ \text{while } (\text{num} > 0) \\ \underline{\text{rem}} &= \text{num} \% 10 \\ \text{num} &= \text{num} / 10 \\ \text{sum} &= (\cancel{\underline{\text{sum}}} * 10 + \cancel{\underline{\text{rem}}}) = \cancel{\underline{4}} \\ \text{print}(\text{sum}) \\ &\quad \swarrow \text{shifting our} \\ &\quad \text{place from} \\ &\quad 1's \rightarrow 10's \rightarrow 100 \dots \end{aligned}$$

$4 * 10 + 3 = 43$
 $43 * 10 + 2 = 432$



$$\text{sum} = \cancel{\underline{4}} \cancel{\underline{3}} \underline{\underline{4}}$$

$$\left\{ \text{sum} = \cancel{\underline{\text{sum}}} * \cancel{\underline{10}} + \cancel{\underline{\text{rem}}} \right.$$

$$\begin{aligned} \text{sum} &= 0 * 10 + 4 \\ &= \cancel{\underline{4}} \end{aligned}$$

$$\begin{aligned} \text{sum} &= \cancel{\underline{4}} * \cancel{\underline{10}} + 3 \\ &= \cancel{\underline{43}} \end{aligned}$$

$$\begin{aligned} \text{sum} &= 43 * 10 + 2 \\ &= 432 \end{aligned}$$

Scanner scn = new Scanner(System.in);

Memory

```

/* Enter your code here. Read input from
Scanner scn = new Scanner(System.in);
int num =scn.nextInt(); → 54326
int sum = 0;
while(num > 0){ ✓
    int rem = num % 10;
    num = num /10; ✓
    sum = sum * 10 + rem;
}
System.out.println(sum);

```

6234 × 10 + 5
= 62345
623 × 10 + 4 = 6230 + 4
= 6234

Memory

num = ~~54326~~
sum = 0 62345
rem = ~~8765432~~

Output = 62345

```

static int reverse(int num){
    int sum = 0;
    while(num > 0){
        int rem = num % 10;
        num = num /10;
        sum = sum * 10 + rem;
    }
    return sum;
}

public static void main(String[] args) {
    /* Enter your code here. Read input from
    Scanner scn = new Scanner(System.in);
    int num =scn.nextInt(); ✓

    int ans = reverse(num);
    System.out.println(ans);
}

```

logic

Print count of digits and digits line by line.

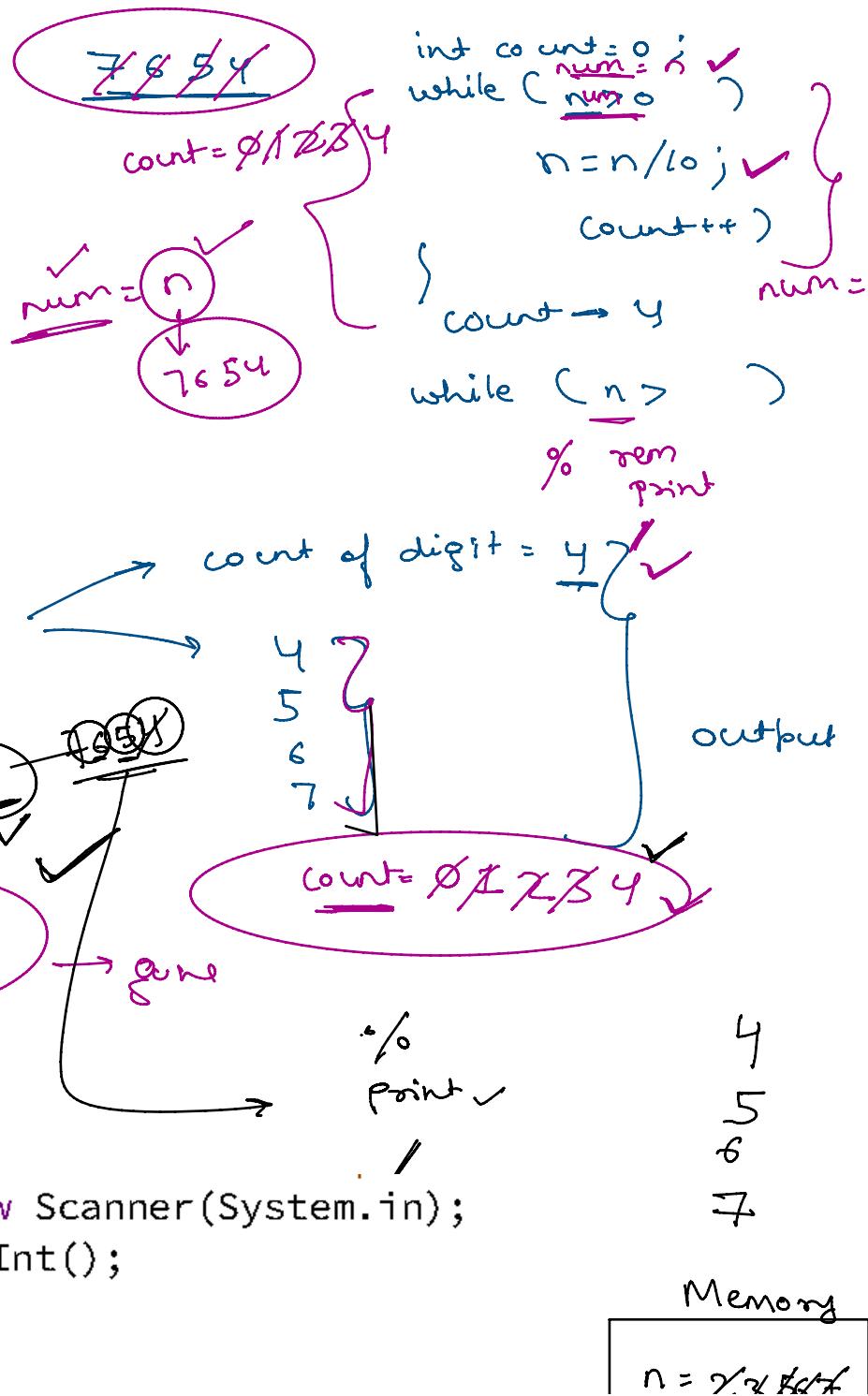
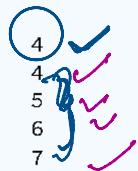
[Problem](#)[Submissions](#)[Leaderboard](#)[Discussions](#)

You will be given a number greater than or equal to zero. Print the count of digits in the first line and then you have to print its digits from the digit at one's place till the digit at the largest place value such that each digit should be printed in a separate line.

Sample Input 0

7654

Sample Output 0



```
int num = n;  
int count = 0;  
while(num > 0){  
    num = num / 10;  
    count++;  
}  
System.out.println(count);  
while(n > 0){  
    int rem = n % 10;  
    System.out.println(rem);  
    n = n/10;  
}
```

$$n = \cancel{2} \cancel{3} \cancel{5} \cancel{6} \cancel{7}$$

$$num = \cancel{2} \cancel{3} \cancel{5} \cancel{6} \cancel{7}$$

$$count = \cancel{1} \cancel{2} \cancel{3} \cancel{4} 5$$

$$rem = \cancel{7} \cancel{6} \cancel{5} \cancel{3} 2$$

5
7
6
3