

## # Pre Increment & Post Increment

$x = 10$

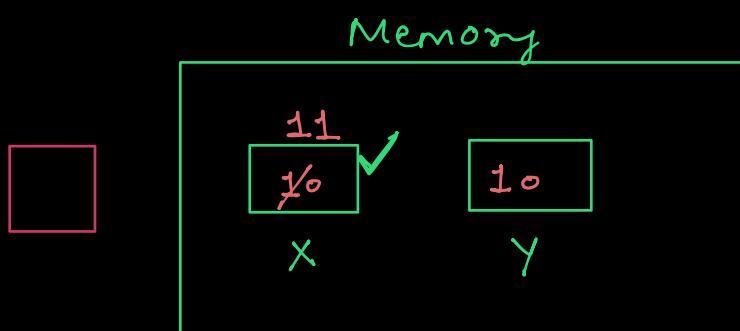
$\{ \text{++}x; \}$  → unary operator

↳ first increase the value }  
↳ 2nd assign value }

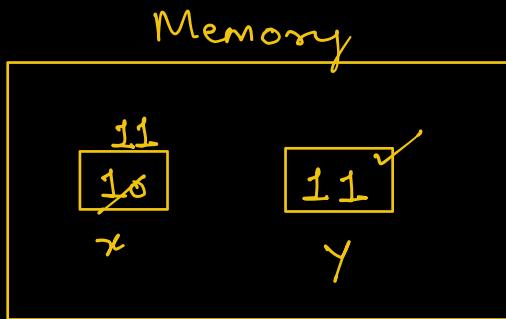
$\{ x++; \}$  ✓  
↳ 1st assign the value ✓

↳ Increase the value by 1

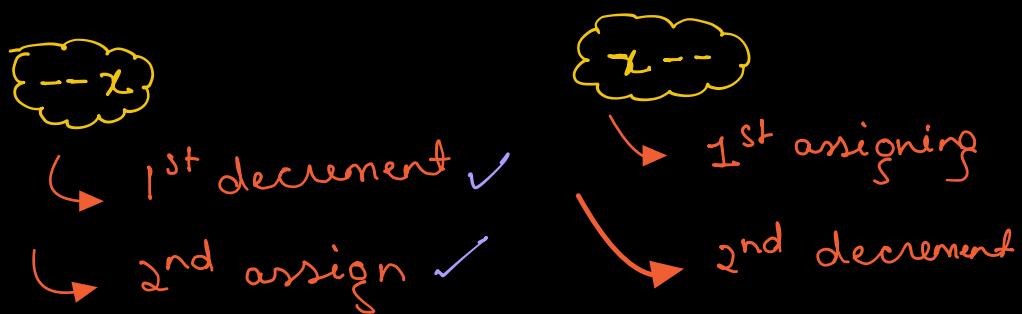
```
int x = 10;  
int y = x++; // post increment  
System.out.println(y); → 10  
System.out.println(x); → 11  
}
```



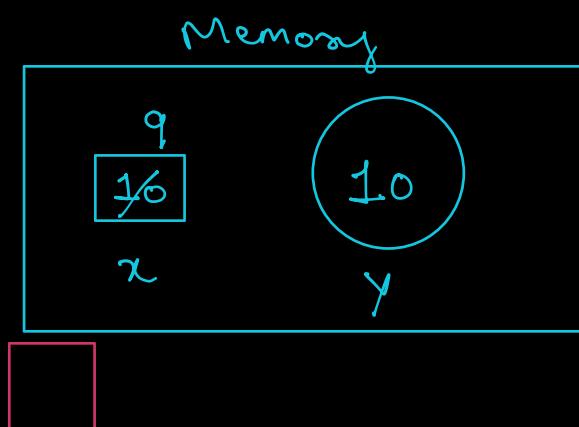
```
ic class Main {  
public static void main(String[] args) {  
    int x = 10;  
    int y = ++x; // pre increment  
    System.out.println(y); → 11  
    System.out.println(x); → 11  
}
```



## # PreDecrement & Post Decrement

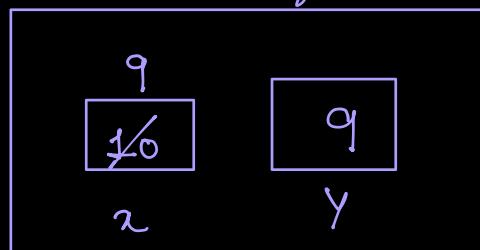


```
int x = 10;
int y = x--; // post decrement
System.out.println(y); // 10✓
System.out.println(x); // 9✓
```



```
int x = 10;  
int y = --x; // pre decrement  
System.out.println(y); // 9  
System.out.println(x); // 9
```

Memory



## Print n, n-3, n-6 .....

Problem

Submissions

Leaderboard

Discussions

You will be given an input n of integer data type. →  $n \rightarrow \text{input}$

You have to print the series n, n-3, n-6.... →  $i = i - 3$

Important points: 1. You have to print each number in a different line

2. Also you have to print till the time the printed value is greater than 0.

Take a look at the sample test cases.

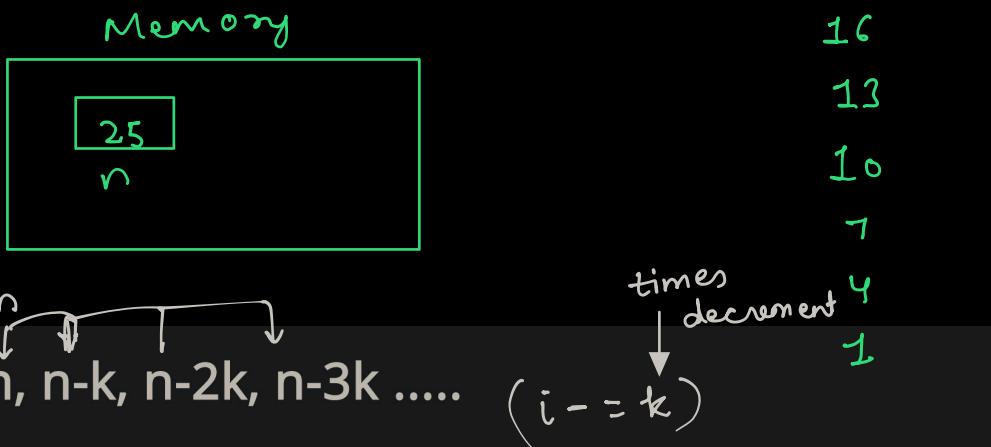
$i \geq 1$

```
for( int i=n ; i>0 ; i-=3 )  
    print (i);
```

```

/* Enter your code here. Read input
Scanner scn = new Scanner(System.in)
int n =scn.nextInt(); → 25
for(int i = 25n ; i>0 ; i-=3){
    System.out.println(i); → 25
}
                                22
                                19

```



Problem

Submissions

Leaderboard

Discussions

You will be given two integers  $n$  and  $k$  as an integer input.

You have to print the series  $n, n-k, n-2k, n-3k \dots$  where each number should be printed in a separate line and you have to print till the time the printed integer is greater than or equal to zero.

$n \rightarrow$  input

Kindly take a look at the sample test cases for a better understanding.

$k \rightarrow$  input

Input Format

$\text{for}(i=n ; i>0 ; i-=k){}$

For each test case,  $n$  will be given as an integer input in the first line,  $k$  will be given as an integer input in the second line.

$\text{print}(i);$

}

```

/* Enter your code here. Read input from
Scanner scn = new Scanner(System.in);
int n = scn.nextInt(); 30
int k = scn.nextInt(); 4

for(int i = 30; i >= 0; i -= k){
    System.out.println(i); → 30
}

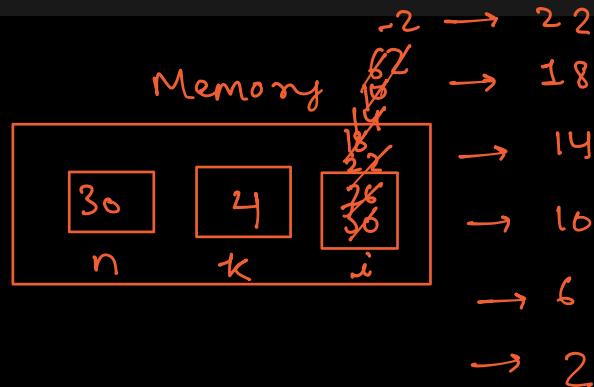
```

Sample Input 0

30  
4

Sample Output 0

30  
26  
22  
18  
14  
10  
6  
2



## Print n, n-k, n-2k, n-3k.... till l

Problem

Submissions

Leaderboard

Discussions

You will be given three integer inputs  $n, k$  and  $l$  and you have to print the series  $n, n-k, n-2k, n-3k\dots$  till last where the value printed in the end should be just greater than or equal to the given input  $l$ .

To be clear: You will print  $l$  if  $l$  belongs to the series.

Input Format

For each test case, you will get

$n$  in the first line as an integer input,

$k$  in the second line as an integer input,

$l$  in the third line as an integer input.

$n$   
 $k$   
 $i$ } input

for (int i=n; i>=l; i-=k)  
print(i);

```

Scanner scn = new Scanner(System.in);
int n = scn.nextInt();
int k = scn.nextInt(); ✓
int I = scn.nextInt();

for(int i = 50 ; i>=I ; i-=k){
    System.out.println(i); → 50
}

```

45  
40  
35  
30  
25  
20  
15  
10  
5

Sample Input 0

```

50 ✓
5
4

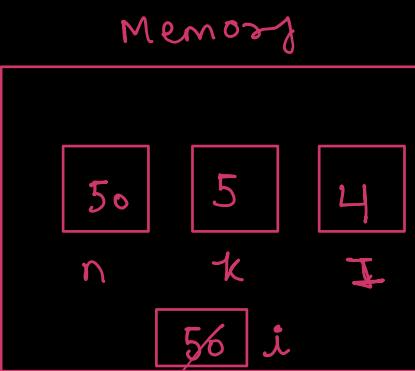
```

Sample Output 0

```

50 ↗
45
40
35
30
25
20
15
10
5

```



print a to z

Problem

Submissions

Leaderboard

Discussions

You have to print characters from a till z where each character should be printed in a separate line.

Input Format

No input will be given

Constraints

No constraints are needed

Output Format

Print characters as given in the problem statement.

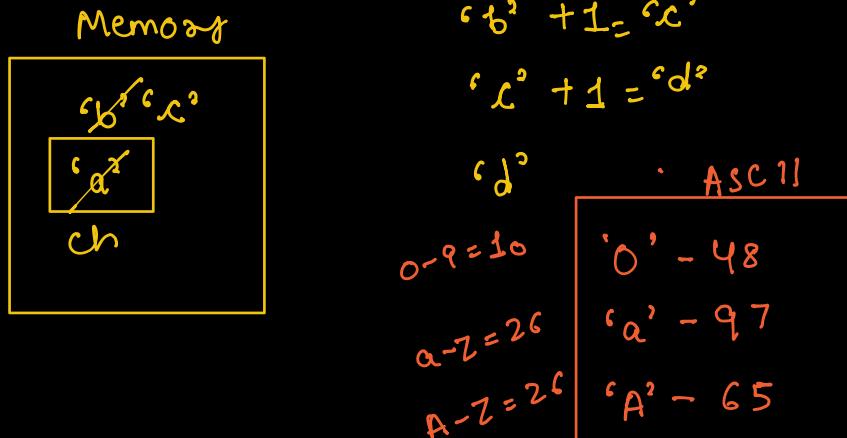
for (char ch='a' ; ch<='z';  
 {ch++})  
 print(ch);  
 'a' + 1 = 98  
 ↓      ↓  
 97     'b'

```

for(char ch = 'a'; 'a' <= 'z'; ch++) {
    System.out.println(ch);
}

```

$'a' + 1 = 'b'$



## Print a, B, c, D, e, F, g..... 26 characters

Problem

Submissions

Leaderboard

Discussions

Print a, B, c, D, e, F, g..... 26 characters where each character should be printed in a separate line.

97	98	99	100	-	-	-	-
a	B	c	D	e	F	g	H
✓	✓	✓	✓	✓	✓	✓	
↑	↑	↑	↑	↑	↑	↑	

$\rightarrow$  odd pos  $\rightarrow$  to Lower Case  
 $\rightarrow$  even pos  $\rightarrow$  to Upper Case

```

for (int i = 97 ; i <= 122 ; i++)
    if (i % 2 == 1)
        print (Character.toLowerCase (char)i)
    else
        print (Character.toUpperCase (char)i)

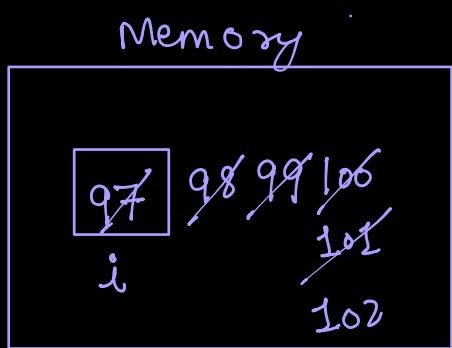
```

```

public static void main(String[] args) {
    /* Enter your code here. Read input from STDIN. Print output
    for(int i = 97 ; i<=122; i++){
        if(i%2==1){✓
            ✓System.out.println(Character.toLowerCase((char)i));
        }else{
            System.out.println(Character.toUpperCase((char)i));
        }
    }
}

```

$\checkmark \quad \text{char}(97)$   
 $\checkmark \quad \text{a}$   
 $\checkmark \quad \text{b} \rightarrow \text{B}$   
 $\checkmark \quad \text{c} \rightarrow \text{C}$   
 $\checkmark \quad \text{d}$   
 $\checkmark \quad \text{e} \rightarrow \text{E}$   
 $\checkmark \quad \text{f} \rightarrow \text{F}$



a  
B  
C  
D  
E  
F

HW\_Print a, c, e... till the characters are less than z

'a' < 'z' ; ch + = 2

Problem

Submissions

Leaderboard

Discussions

(ch + = 2)

```
public static void main(String[] args) {  
    /* Enter your code here. Read input from  
     * System.in. Print output to System.out.  
     */  
    for(char ch = 'a' ; ch<='z' ; ch+=2){  
        System.out.println(ch);  
    }  
}
```

# ✓ B c D e F g H i J ...

char ch1 = 'a'

Char ch2 = 'B'

```
for (int i=1 ; i <= 26 ; i++)
```

if ( $i \% 2 == 1$ )

point(ch1);

$$\text{chit} = 2 ;$$

else print (ch2);

Ch2 t=2 ;

3

'A' 'b' 'L' 'd' 'E' 'f' ...

```

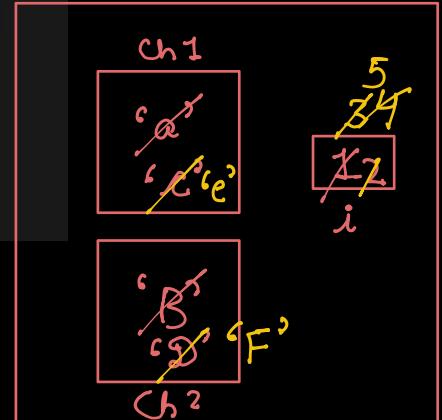
char ch1 ='a';
char ch2 ='B';

for(int i = 1; i<=26 ; i++){
    if(i%2 ==1){ ✓
        System.out.println(ch1);
        ch1+=2; ✓
    }else{ ✓
        System.out.println(ch2);
        ch2+=2; ✓
    }
}

```

'a'  
 'B'  
 'C'  
 'D'

Memory



## HW\_Print z, y, x.... till 26 characters

Problem

Submissions

Leaderboard

Discussions

### Input Format

No input will be given

```

for(char ch = 'z'; ch>='a'; ch--)
    print(ch),

```

```
/* Enter your code here. Read input from STDIN. F
for(char ch ='z' ; ch>='a' ; ch--){
    System.out.println(ch);
}
```

## # While loop

for (initialization; testCond<sup>n</sup>; update){  
    ≡(3)  
    }  
    initialization (1)  
    while ( test Cond<sup>n</sup>(2) ) {  
        ≡ } (3)  
        update (4)  
    }

```
int i =0; // initialization
while (i< 3){ // test cond
    work //System.out.println("Loop is Easy");
    i++; // update
}
```

## # Infinite loop

```
int i =0;  
while (i< 3){ → test cond^ never gets false  
    System.out.println(i);  
    {i--;}  
}
```

## # Break

```
int i =1;  
while (i<= 100){  
    if(i==50){  
        break;  
    }  
    System.out.println(i);✓  
    i++;  
}
```

Memory

```
[X50  
i]
```

```
for(int i =1;i<= 100; i++){  
    if(i==50){  
        break;  
    }  
    System.out.println(i);  
}
```

# Continue

↳ skipping →

```
for(int i = 2; i<11; i++){
    if(i%2 == 1){
        continue; ✓
    }
    System.out.println(i); ✓
}
```

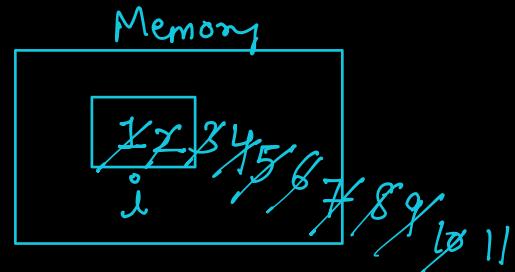
2

4

6

8

10



```
int i=1;
while (i<11)
    if (i%2 == 1)
        continue
    print(i)
    i++;
```