

```
int a;  
a = 5;
```

```
for (int i = 0; i < 5; i++) {
```

```
}
```

→ Syntax

$$i = i - 3$$

$$i = 3$$

Print  $n, n-3, n-6, \dots, > 0$ .

$$n = 20$$

$$\begin{aligned} n &\rightarrow 20, \\ n-3 &\rightarrow 17, \\ n-3-3 &\rightarrow 14 \\ n-3-3-3 &\rightarrow 11 \\ &\vdots \end{aligned}$$

$$\underline{i = n.} \rightarrow 20$$

$$i = i - 3 = 17$$

$$i = i - 3 = 14$$

$$i = i - 3 = 14 - 3 = 11$$

$$i = 2$$

```
for (int i = 20;
      i > 0; i -= 3) {
    S.o.p ln(i);
}
```

Print  $n, n-k, n-2k, n-3k \dots$

Until printed integer is greater than equal to 0.

$$\begin{array}{l}
 n \rightarrow 30 \\
 k \rightarrow 4
 \end{array}
 \left\{
 \begin{array}{l}
 30 - 0 \times 4 = 30 - 0 = 30 \\
 30 - 1 \times 4 = 26 \\
 30 - 2 \times 4 = 30 - 8 = 22 \\
 30 - 3 \times 4 = 30 - 12 = 18 \\
 30 - 4 \times 4 = 30 - 16 = 14
 \end{array}
 \right\}
 \left\{
 \begin{array}{l}
 30 - 5 \times 4 = 30 - 20 = 10 \\
 30 - 6 \times 4 = 30 - 24 = 6 \\
 30 - 7 \times 4 = 30 - 28 = 2 \\
 \hline
 30 - 8 \times 4 = 30 - 32 = -2
 \end{array}
 \right.$$

i=0, i=1,

$$30 - 0 \times 4 = n - 0 \times k = 30$$

$$30 - 1 \times 4 = n - 1 \times k = 26$$

$$30 - 2 \times 4 = n - 2 \times k = 22$$

$$30 - 3 \times 4 = n - 3 \times k = 18$$

$$30 - 4 \times 4 = n - 4 \times k = 14$$

$$30 - 5 \times 4 = n - 5 \times k = 10$$

$$30 - 6 \times 4 = n - 6 \times k = 6$$

$$30 - 7 \times 4 = n - 7 \times k = 2$$

$$30 - 8 \times 4 = n - 8 \times k = \underline{-2}$$

$$n - 0 \times k$$

$$n - i \times k$$

$$n - 1 \times k$$

$$i=2$$

$$n - 2 \times k$$

$$i=3$$

$$n - 3 \times k$$

$$\underline{n - i \times k \geq 0},$$

← condition

```
for(int i=0; n-i*k >= 0; i++) {
```

```
    int res = n - i * k;
```

```
    s.o.pln(res);
```

```
}
```

Print a to z .

'a'  $\rightarrow$  char ch

'b'

'c'

'd'

i: 'a'  $\rightarrow$  97

i:  $97 + 1 = 'a' + 1 = 98$

ch = 'a'

ch = ch + 1

ch = 'b'

ch = ch + 1

= 'b' + 1

= c.

a, c, e, g, i . . .

$i = 'a'$ ,  $97 + 2 = 99$

$\uparrow \quad \searrow$

$i = i + 2 = 'a' + 2 = 'c'$