

Ques Print alp. from 'a' to 'z'.

```
for (int i = 97; i <= 122; i++) {
    Syso ((char) i);
}
```

```
for (int i = 97; i <= 122; i++) {
    char ch = (char) i;
    System.out.println(ch);
}
```

⇒ ASCII values

Decimal	Hex	Char	Decimal	Hex	Char	Decimal	Hex	Char	Decimal	Hex	Char
0		(NUL)	32		(SPRCE)	64		@	96		
1		(START OF HEADING)	33		!	65	A	A	97	a	a
2		(START OF TEXT)	34		"	66	B	B	98	b	b
3		(END OF TEXT)	35		#	67	C	C	99	c	c
4		(END OF TRANSMISSION)	36		\$	68	D	D	100	d	d
5		(ENQUIRY)	37		%	69	E	E	101	e	e
6		(ACKNOWLEDGE)	38		&	70	F	F	102	f	f
7		(BELL)	39		'	71	G	G	103	g	g
8		(BACKSPACE)	40		(	72	H	H	104	h	h
9		(HORIZONTAL TAB)	41		)	73	I	I	105	i	i
10		(LINE FEED)	42		+	74	J	J	106	j	j
11		(VERTICAL TAB)	43		=	75	K	K	107	k	k
12		(FORM FEED)	44		,	76	L	L	108	l	l
13		(CARRIAGE RETURN)	45		-	77	M	M	109	m	m
14		(SHIFT OUT)	46		.	78	N	N	110	n	n
15		(SHIFT IN)	47		/	79	O	O	111	o	o
16		(DATA LINK ESCAPE)	48		0	80	P	P	112	p	p
17		(DEVICE CONTROL 1)	49		1	81	Q	Q	113	q	q
18		(DEVICE CONTROL 2)	50		2	82	R	R	114	r	r
19		(DEVICE CONTROL 3)	51		3	83	S	S	115	s	s
20		(DEVICE CONTROL 4)	52		4	84	T	T	116	t	t
21		(NEGATIVE ACKNOWLEDGE)	53		5	85	U	U	117	u	u
22		(SYNCHRONOUS IDLE)	54		6	86	V	V	118	v	v
23		(END OF TRANS. BLOCK)	55		7	87	W	W	119	w	w
24		(CANCELED)	56		8	88	X	X	120	x	x
25		(END OF MEDIUM)	57		9	89	Y	Y	121	y	y
26		(SUBSTITUTE)	58		:	90	Z	Z	122	z	z
27		(ESCAPE)	59		;	91	[	[	123	{	{
28		(FILE SEPARATOR)	60		<	92	\	\	124	|	|
29		(GROUP SEPARATOR)	61		=	93	]	]	125	}	}
30		(RECORD SEPARATOR)	62		>	94	^	^	126	~	~
31		(UNIT SEPARATOR)	63		?	95	_	_	127	(DEL)	(DEL)

'a' → 'z'

abcd

→ 97 98 99 100

→ 0 1 10 11

binary form

Syntax

for (initiator ; condition ; incre/decre) {
 }
}

Ans

int i, j;
for (i=65, j=97 ; i<=90 && j<=122 ; i++, j++) {
 // conditions // incre.

i=65, j=97

char large = (char) i;

char small = (char) j;

System.out.println(large + small + " ");
}

```
for (int i = 65, j = 97; i <= 90 && j <= 122; i++, j++) {
    char large = (char) i;
    char small = (char) j;
    System.out.print(large + " " + small + " ");
}
```

Ques Aa _ Bb _ Cc _ _ _ _ _ Yy _ Zz

Hint :- for loop syntax

Ques

Az _ By _ Cw _ _ _ _ _ Yb _ Za

Ques Input any no. and print its factors

num = 8 10
 ↳ 1, 2, 4, 8 ↳ 1, 2, 5, 10

i=1, 8%1==0 ✓
 i=2, 8%2==0 ✓
 i=3, 8%3==0 ✗
 i=4, 8%4==0 ✓
 i=5, ✗
 i=6, ✗
 i=7, ✗
 i=8, ✓

```
Scanner scn = new Scanner(System.in);
int num = scn.nextInt();
for (int i = 1; i <= num; i++) {
    if (num % i == 0) {
        System.out.print(i + ", ");
    }
}
```

Ques Input a no. and print its factorial.

$$n! = n \times (n-1) \times (n-2) \times (n-3) \times \dots \times 2 \times 1$$

$$5! = 5 \times 4 \times 3 \times 2 \times 1$$

$$= 120$$

(n)

```
Scanner scn = new Scanner(System.in);
int n = scn.nextInt();
int ans = 1;
for (int i = n; i >= 1; i--) {
    ans = ans * i;
}
System.out.println(ans);
```

Ques take 2 number and print HCF.

(Highest common factor)

e.g., a = 20, b = 8, HCF = 4

```
int ans = 1;
for (int i = 1; i <= a; i++) {
    if (a % i == 0 && b % i == 0) {
        ans = i;
    }
}
System.out.println(ans);
```

Dry run

T T
 i=1, 20%1==0 && 8%1==0, ans = 1
 i=2, 20%2==0 && 8%2==0, ans = 2
 i=3, 20%3!=0 && 8%3!=0, ans = 2
 i=4, 20%4==0 && 8%4==0, ans = 4
 i=5, 20%5==0 && 8%5!=0, ans = 4
 i=6, 20%6!=0 && 8%6!=0, ans = 4
 i=7, 20%7!=0 && 8%7!=0, ans = 4
 i=8, 20%8!=0 && 8%8==0, ans = 4

H.W

Ques Input 2 no. and print its LCM.

Ques Input any digit no. and find its reverse.