

## # Characters Method () :

Sunday ✓

- ① isLetter() → 'c' 'D' '1' '2' 'q'

T T F F T

- ② isDigit() → F F T T F

- ③ isWhitespace → ' ' 'n' 't'

System.out.println()

nextline tab

Boolean  
T/F

- ④ isUpperCase() → 'c' 'd' 'E' 'G'

F F T T

- ⑤ isLowerCase() → 'c' 'd' 'E' 'g'

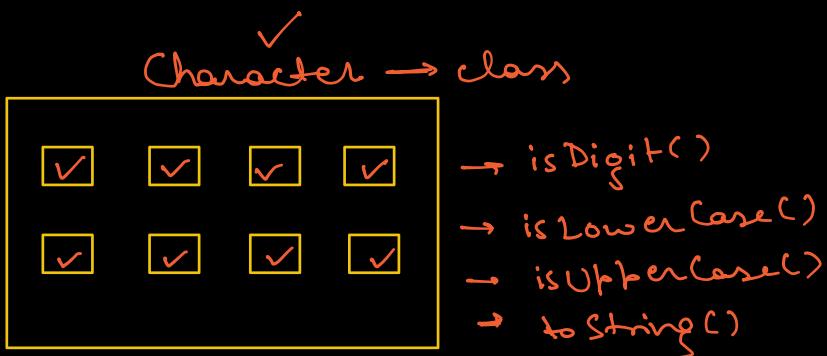
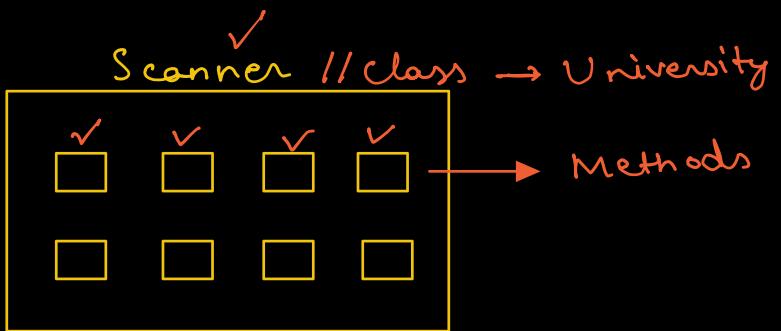
F F F F

- ⑥ toUpperCase() → 'e' → 'E'  
'f' → 'F'  
'E' → 'E'

return

- ⑦ toLowerCase() → 'e' → 'e'  
'G' → 'g'  
'd' → 'd'

- ⑧ toString() → 'L' → "L"



# isLetter()  
static void main must be defined in a public class.

```
ic class Main {
public static void main(String[] args) {
    System.out.println(Character.isLetter('c'));
```

System.out.println(Character.isLetter('c'));	true
System.out.println(Character.isLetter('1'));	false
System.out.println(Character.isLetter('2'));	false
System.out.println(Character.isLetter('e'));	true
System.out.println(Character.isLetter('g'));	true

# isDigit()

```
public static void main(String[] args) {
    System.out.println(Character.isDigit('c'));
```

System.out.println(Character.isDigit('c'));	→ false
System.out.println(Character.isDigit('1'));	→ true
System.out.println(Character.isDigit('2'));	→ true
System.out.println(Character.isDigit('e'));	→ false
System.out.println(Character.isDigit('g'));	→ false

## # isWhitespace()

```
public static void main(String[] args) {  
    System.out.println(Character.isWhitespace('c')); → false  
    System.out.println(Character.isWhitespace(' ')); → true  
    System.out.println(Character.isWhitespace('\n')); → true  
    System.out.println(Character.isWhitespace('e')); → false  
    System.out.println(Character.isWhitespace('\t')); → true
```

## # isUpperCase()

```
public static void main(String[] args) {  
    System.out.println(Character.isUpperCase('c')); → false  
    System.out.println(Character.isUpperCase('D')); → true  
    System.out.println(Character.isUpperCase('G')); → true  
    System.out.println(Character.isUpperCase('F')); → true  
    System.out.println(Character.isUpperCase('\t')); → false
```

## # isLowerCase()

```
public static void main(String[] args) {  
    System.out.println(Character.isLowerCase('c')); → true  
    System.out.println(Character.isLowerCase('D'));  
    System.out.println(Character.isLowerCase('G'));  
    System.out.println(Character.isLowerCase('F'));  
    System.out.println(Character.isLowerCase('\t'));
```

## # toUpperCase()

System.out.println(Character.toUpperCase('c'));	C
System.out.println(Character.toUpperCase('D'));	D
System.out.println(Character.toUpperCase('G'));	G
System.out.println(Character.toUpperCase('F'));	F
System.out.println(Character.toUpperCase('\t'));	

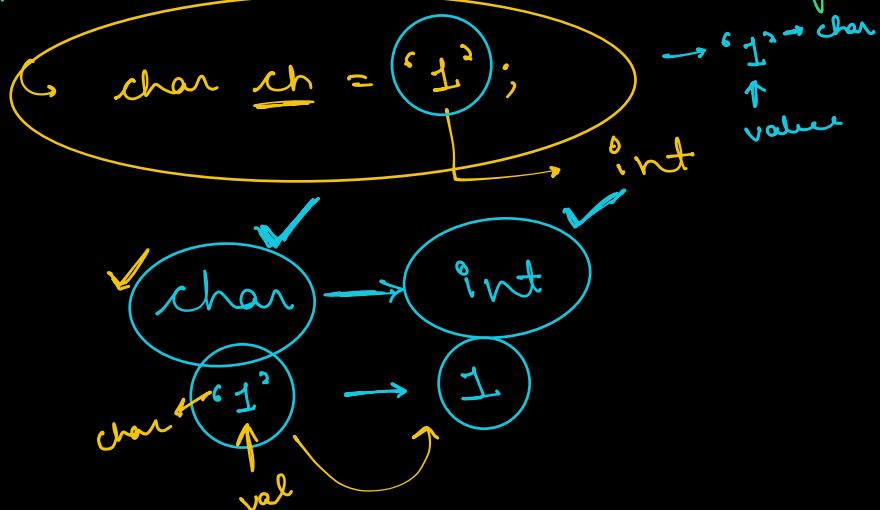
## # toLowerCase()

```
System.out.println(Character.toLowerCase('c'));  
System.out.println(Character.toLowerCase('D'));  
System.out.println(Character.toLowerCase('G'));  
System.out.println(Character.toLowerCase('F'));  
System.out.println(Character.toLowerCase('\t'));
```

## # toString()

```
public static void main(String[] args) {  
    System.out.println(Character.toString('c'));  
    System.out.println(Character.toString('D'));  
    System.out.println(Character.toString('G'));  
    System.out.println(Character.toString('F'));  
    System.out.println(Character.toString('\t'));
```

## # How to convert char to int in java



- Using ASCII Value
- Character.getNumericValue()
- char to int by subtracting with '0';

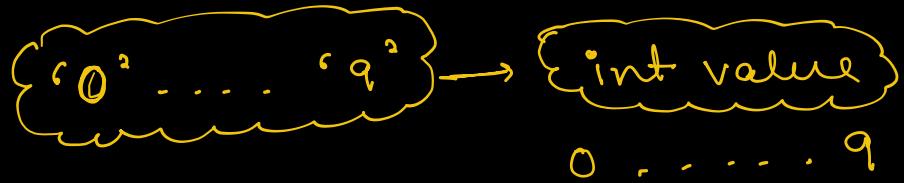
## # ASCII Value

**ASCII Table**

Code Char	Code Char	Code Char	Code Char
0 NUL (null)	32 SPACE	64 @	96 `
1 SOH (start of heading)	33 !	65 A	97 a
2 STX (start of text)	34 "	66 B	98 b
3 ETX (end of text)	35 #	67 C	99 c
4 EOT (end of transmission)	36 \$	68 D	100 d
5 ENQ (enquiry)	37 %	69 E	101 e
6 ACK (acknowledge)	38 &	70 F	102 f
7 BEL (bell)	39 '	71 G	103 g
8 BS (backspace)	40 (	72 H	104 h
9 TAB (horizontal tab)	41 )	73 I	105 i
10 LF (NL line feed, new line)	42 *	74 J	106 j
11 VT (vertical tab)	43 +	75 K	107 k
12 FF (NP form feed, new page)	44 ,	76 L	108 l
13 CR (carriage return)	45 -	77 M	109 m
14 SO (shift out)	46 .	78 N	110 n
15 SI (shift in)	47 /	79 O	111 o
16 DLE (data link escape)	48 0	80 P	112 p
17 DC1 (device control 1)	49 1	81 Q	113 q
18 DC2 (device control 2)	50 2	82 R	114 r
19 DC3 (device control 3)	51 3	83 S	115 s
20 DC4 (device control 4)	52 4	84 T	116 t
21 NAK (negative acknowledgement)	53 5	85 U	117 u
22 SYN (synchronous idle)	54 6	86 V	118 v
23 ETB (end of trans. block)	55 7	87 W	119 w
24 CAN (cancel)	56 8	88 X	120 x
25 EM (end of medium)	57 9	89 Y	121 y
26 SUB (substitute)	58 :	90 Z	122 z
27 ESC (escape)	59 ;	91 [	123 {
28 FS (file separator)	60 <	92 \	124
29 GS (group separator)	61 =	93 ]	125 }
30 RS (record separator)	62 >	94 ^	126 ~
31 US (unit separator)	63 ?	95 _	127 DEL

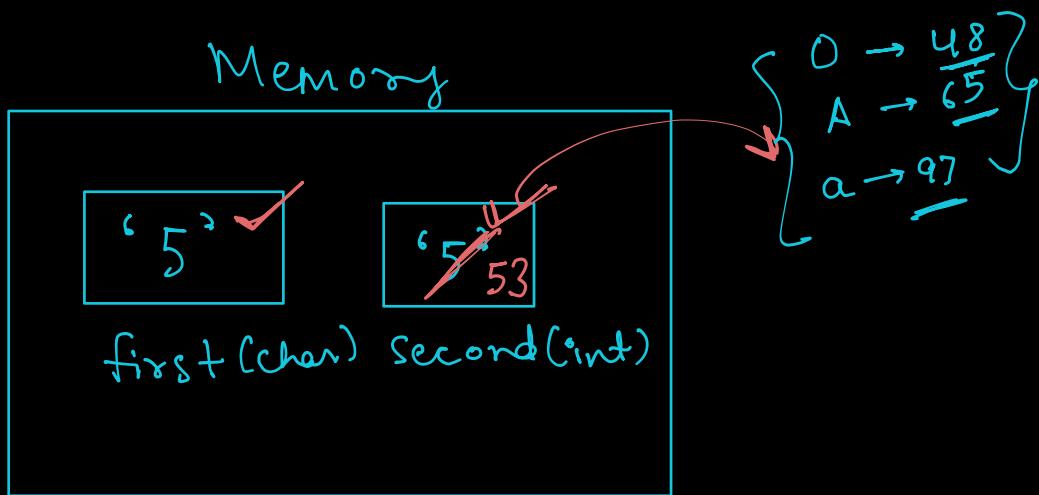
$$\begin{cases} 0 - 9 \rightarrow (48 - 57) \\ A \rightarrow 65 \\ a \rightarrow 97 \end{cases} \rightarrow '0' '1' '2' '3' '4' \dots '9' \checkmark$$

$$\rightarrow '11' '119' \alpha$$



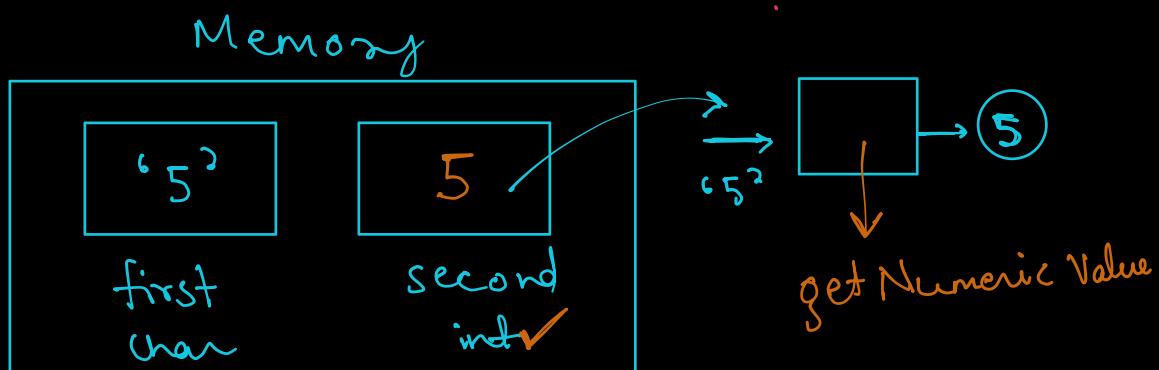
## # ASCII table

```
public static void main(String[] args) {
    char first = '5';
    int second = first; ✓ → ASCII value
    System.out.println("char Value : " + first); ✓ 5
    System.out.println("ASCII Value : " + second); ➔ 53
    int num = second - 48; ➔ 53 - 48 = 5
    System.out.println("Int value: " + num);
}
```



## # Using Character.getNumericValue()

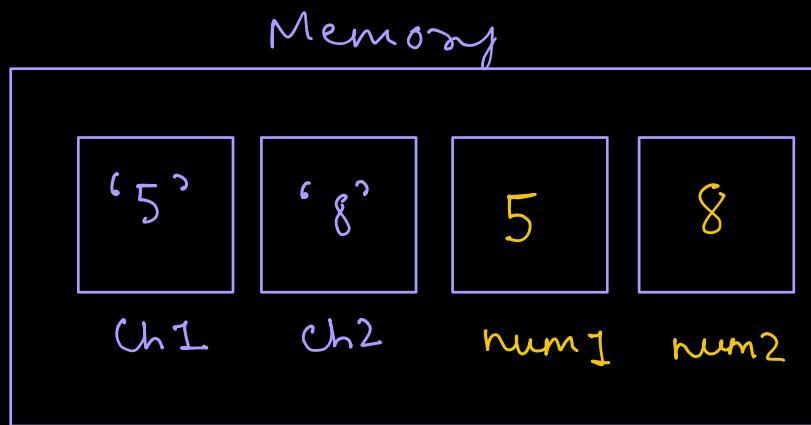
```
public static void main(String[] args) {
    char first = '5'; ✓
    System.out.println("char Value : " + first);
    int second = Character.getNumericValue(first); ↴
    System.out.println("int value : " + second);
        "5" → 5 ✓
}
```



## # Subtracting with '0'

```
public static void main(String[] args) {
    char ch1 = '5';
    char ch2 = '8';

    // convert char variable to int by sub with '0';
    int num1 = ch1 - '0'; '5' - '0'
    int num2 = ch2 - '0'; ↑ ↓
                    53 - 48 = 5
                    '8' - '0' = 56 - 48 = 8
    System.out.println(num1);
    System.out.println(num2);
```



## Male or Female

Problem

Submissions

Leaderboard

Discussions

Take in a character as a character input from the user and print "You are a male" if 'M' or 'm' is taken as input. And print "You are a female" if 'F' or 'f' is taken as input. And if some other character is taken as an input, then print "Type again".

**Input Format**

For each test case, You will be given a character as a character input.

Scanner

char ch = scr.next().charAt(0);

if (ch == 'M' || ch == 'm')  
 → You are a male

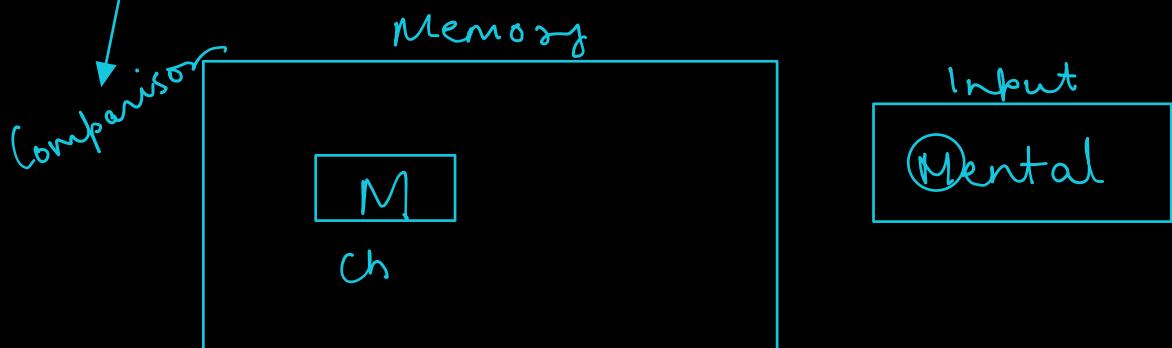
else if (ch == 'F' || ch == 'f')  
 → You are a female

else → Type again

```

Scanner attempted = new Scanner(System.in);
char ch = scn.next().charAt(0);
if(ch == 'M' || ch == 'm'){
    System.out.println("You are a male");
} else if(ch == 'F' || ch == 'f'){
    System.out.println("You are a female");
} else{
    System.out.println("Type again");
}

```



## Jump three character to right.

Problem

Submissions

Leaderboard

Discussions

Take in a character as an input and manipulate it as given under

i. Condition 1: If the entered character is a small-case character, then

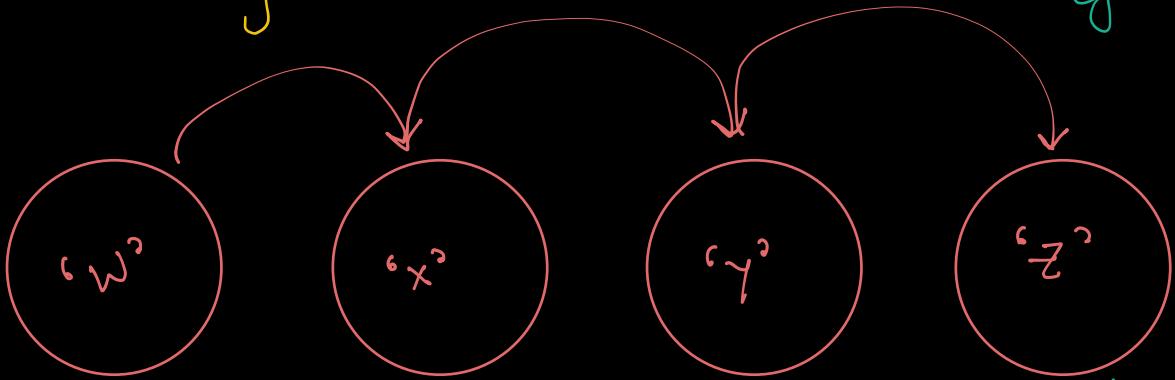
A. If the character is from character 'a' and till the character 'w', both 'a' and 'w' included, then Jump three times and print the resulting character as explained in the example below, For eg. If 'a' is given then print 'd', If 'b' is given then print the character 'e', If 'c' is given then print the character 'f', If 'w' is given then print the character 'z'

B. Else print the string "Can't jump"

ii. Condition 2: If the entered character is not a small case character, then print the string "Not a small case"

✓ if ( ch > 'a' || ch ≤ 'z' ) {  
 if ( a ↔ w )

char ans = (char) ch + 3  
 print(ans);  
 } else {  
 type cast  
 Not a small case  
 }



a + 3 = d  
 b + 3 = e  
 c + 3 = f  
 :  
 w + 3 = z

char to int  
int to char  
 type-casting

97 / ch + 3 = 100  
 decode

```

Scanner s; Attempted: 11
Scanner scn = new Scanner(System.in);
char ch = scn.next().charAt(0); → s q
if(ch>='a' && ch <='z'){
    if(ch>='a' && ch <='w'){
        char ans = (char)(ch + 3); → q + 3
        System.out.println(ans); → t
    }else{
        System.out.println("Can't jump");
    }
}else{
    System.out.println("Not a small case");
}

```

