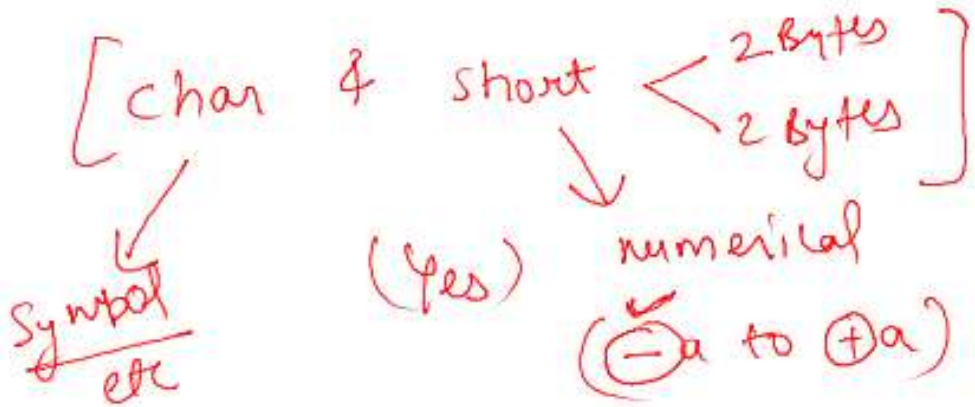



```
char ch = '4';
short a = (short) ch;
```

```
switch (ch) {
    case '0':
        int a = 10;
        switch (a) {
            case 10:
                {
                break
            }
```

Ques

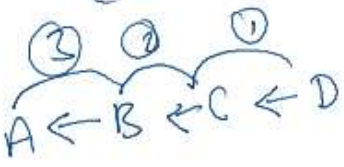
char ch = ?

(a to w) → ch+3

char((ch) + 3) → int

char

(D to z) → ch − 3



'A' → can't jump

Jump three →

Small – 'a' to 'w' +3

capital – 'D' to 'Z' −3

else 'can't Jump'.

```
Scanner scn = new Scanner(System.in);
    char ch = scn.next().charAt(0);
    if(ch >='a' &&  ch<= 'w'){
        char ch1 = (char)(ch+3);
        System.out.println(ch1);
    }else if(ch >='D' && ch<='Z'){
        char ch2 = (char)(ch-3);
        System.out.println(ch2);
    }else{
        System.out.println("Can't jump");
    }
/* Enter your code here. Read input from STDIN. Print output to S
```

Can't Jump

ch → x → d+3

ch2 → H → 100+3 → 103 → (char)103 → g

ch − 3 → 86 − 3 → (char)83 → =

char + int ⇒ int

⇓

(char)

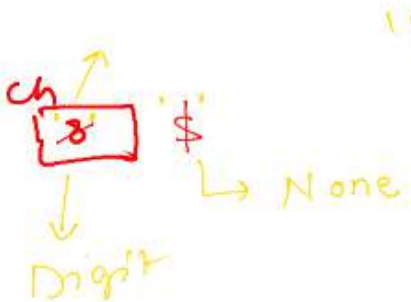
Que CapitalSmallOrDigit

- 'a' to 'z' ⇒ Small case
- 'A' to 'Z' ⇒ Capital case
- '0' to '9' ⇒ Digit
- else 'None'

```
public static void main(String[] args) {
        Scanner scn = new Scanner(System.in);
        char ch = scn.next().charAt(0);
        if(ch >='a' &&  ch<= 'z'){
            System.out.println("Small case");
        }else if(ch >='A' && ch<='Z'){
            System.out.println("Capital case");
        }else if(ch >='0' && ch<='9'){
            System.out.println("Digit");
        }else{
            System.out.println("None");
        }
    /* Enter your code here. Read input from STDIN. Print output to STD
}
```

Digit

None



Ques is a Digit

char ch = '5'

↳ int +100

↳ print

Character.getNumericValue()

[inbuild]

without using inbuild

→ ASCII

'a' = 48 + a

digit ↔ numeric value

'a' - 48 = a

(ch - 48) = val

ch	ASCII	ch
'0'	48	Numeric val = 0
'1'	49	48 - 48 = 1
'2'	50	49 - 48 = 2
'3'	51	50 - 48 = 3
'4'	52	51 - 48 = 4
'5'	53	52 - 48 = 5
'6'	54	53 - 48 = 6
'7'	55	54 - 48 = 7
'8'	56	55 - 48 = 8
'9'	57	56 - 48 = 9

```
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
        char ch = scn.next().charAt(0);

        if(ch >='0' && ch<= '9'){
            int val = ch - 48;
            System.out.println(val+100);
        }else{
            System.out.println("This is not a digit");
        }
    /* Enter your code here. Read input from STDIN. Print output to STDOUT
}
```

56

'8' - 48

val

8 ⇒ 108

'0'

ASCII 56 - 48

ch '8'

8

8

numeric value = ASCII - 48

Qw Toggle a character

'a' → 'A'

'A' → 'a'

'a' = 97

32 ↕

'A' = 65

'b' ⇒ 97+1

32 ↕

'B' = 65+1

'A' → 'a'

65 + 32 = 97

'c' = 99

↕32

'C' = 67

Small (ch) = Capital (ch)

32

'a' > 'A'

97 - 32 = 'A'

Small - 32 ⇒ Capital

Capital + 32 = Small

```
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
        char ch = scn.next().charAt(0);

        if(ch >='a' &&  ch<= 'z'){
            char val = (char)(ch-32);
            System.out.println(val);
        }else if(ch >='A' &&  ch<= 'Z'){
            char val1 = (char)(ch+32);
            System.out.println(val1);
        }
    /* Enter your code here. Read input from STDIN. Print output to STDOUT. Your
}
```

String

↳ Combination of characters

'K' 'a' 'r' 't' 'i' 'k'

"Kartik" → string

String str = " "; → Syntax

String str = "Hello";

memory

str → 4K → Base address

Hello

0 1 2 3 4

4K, 4K+1, 4K+2, 4K+3, 4K+4

5K = 5000

(5000)

str (a)

Base address, 4 distance

H e l l o ⇒ 0 − (length − 1)

0 1 2 3 4

5000+0, 5000+1, 5000+2, 5000+3, 5000+4

5000+0

D − 706

1 Byte, 2 Byte, 1 Byte, 1 Byte

H e l l o

1km, 2km

+1, +1

"a"
0

```
char ch = scn.next().charAt(0);
```

⇓

"a".charAt(0) ⇒ 'a'

0

```
String str = scn.next();
```

⇓

string

Kartik
0 1 2 3 4 5

str.charAt(3)

t ⇒

str.charAt(0)

1) .length() ⇒ size of string
2) .charAt() ⇒ character at that index

next() → input till space (word)
nextLine() ⇒ takes input of whole line

- length ✗
- length() → string

```java
public static void main(String[] args) {
    Scanner scn = new Scanner(System.in);
    String str = scn.next();
    if(str.length()>=4){
        System.out.println(str.charAt(3));
    }else{
        System.out.println("Small string");
    }
    /* Enter your code here. Read input from STDIN. Print output t
}
```

True → (5>=4)

"Hello"
0 1 2 3 4
→ "l"

System.out.println("10+20" + 10+30);

String + int → String + String → String

"10+201030"

String + integer ⇒ String

string ans = str1 + str2
↳ string Concatenation

```java
public static void main(String[] args){
    Scanner scn = new Scanner(System.in);
    String str1 = scn.next();
    String str2 = scn.next();

    if(str1.length()>str2.length()){
        System.out.println(str2+str1+str2);
    }else{
        System.out.println(str1+str2+str1);
    }

}
```