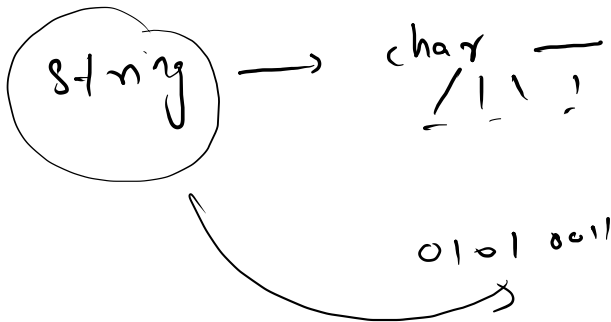
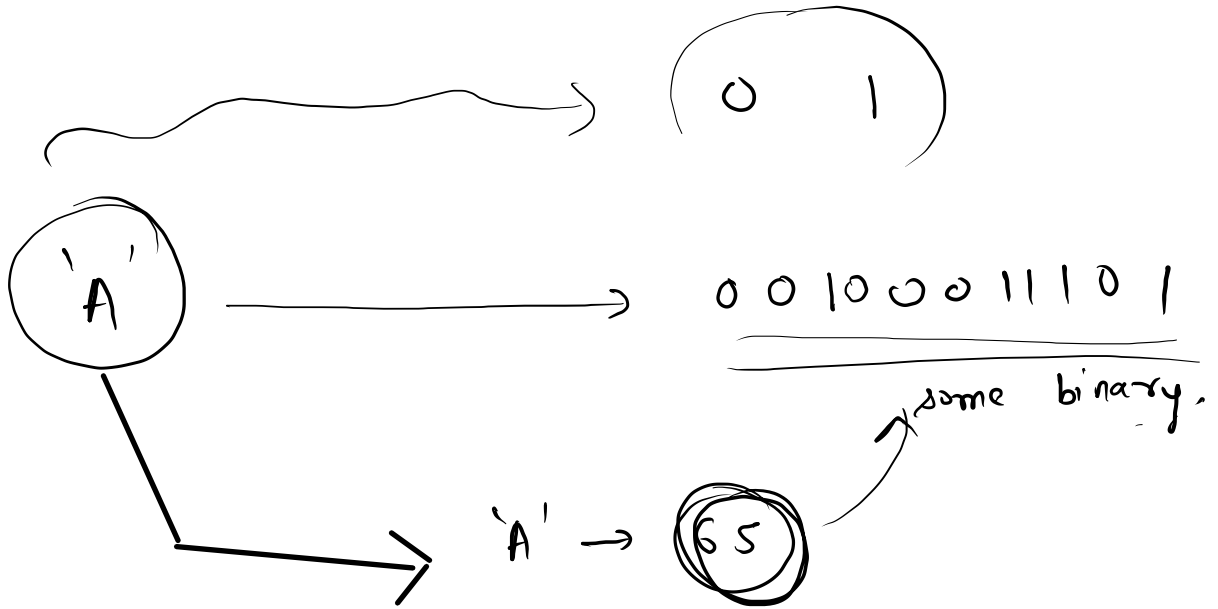
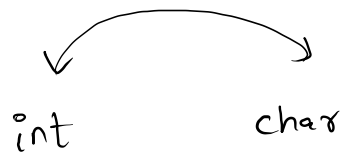
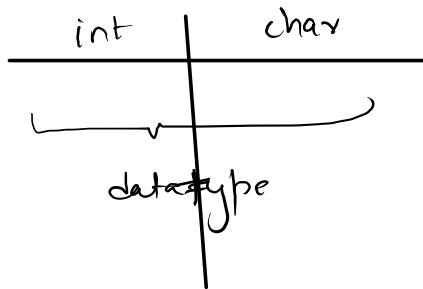


ASCII value.



Type Conversion



implicit

type conversion

explicit

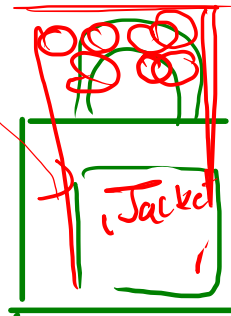
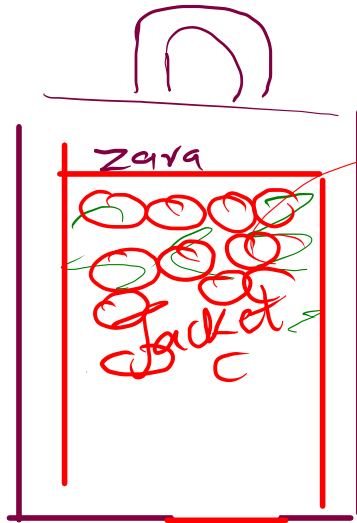
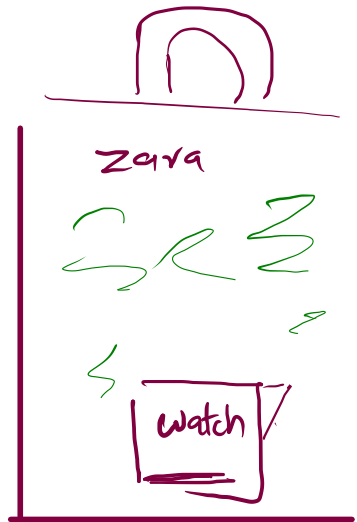
type conversion

when compiler
changes type
automatically.

when user
changes type
externally / manually.

```
main.java
1- import java.util.*;
2- public class Main
3- {
4-     public static void main(String[] args) {
5-         char ch = 'a';
6-         int val = 97;
7-         System.out.println(val);
8-     }
9- }
10
```

```
1
2 public class Main
3 {
4     public static void main(String[] args) {
5         int val = 97;
6         char ch = (char)val;
7         System.out.println(ch);
8     }
9 }
10
```

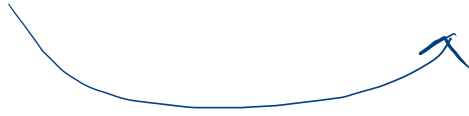


char

'7'

int

7



$$('7') - 48$$

$$55 - 48 = 7$$

$$7 - 0 = 7$$

$$'7' - '0' = 7$$

Add if a digit

Problem	Submissions	Leaderboard	Discussions
---------	-------------	-------------	-------------

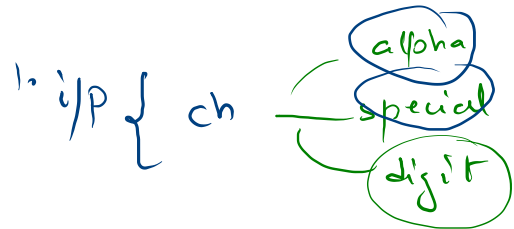
Take in a character as an input from the user

a. If the entered character is a digit then add 100 to the value of the digit entered and print the final answer.

Convert the digit which is added as a character data-type into the integer data-type using two ways,

```
First: By using [Use the in-built function (Character.getNumericValue)]
Second using: By manipulating the digit character data-type into the integer data-type.
```

b. Else print (This is not a digit)



if \rightarrow $ch \geq '0'$ & $ch \leq '9'$

char \rightarrow int
int + 100
print

⊙ This is not a Digit.

```
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         Scanner scn = new Scanner(System.in);
8         char ch = scn.next().charAt(0);
9
10        if(ch >= '0' && ch <= '9'){ ✓
11            int val = ch - '0';
12            val = val + 100;
13            System.out.println(val);
14        }
15        else{
16            System.out.println("This is not a digit");
17        }
18    }
19 }
20 }
```

```
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         Scanner scn = new Scanner(System.in);
8         char ch = scn.next().charAt(0);
9
10        if(ch >= '0' && ch <= '9'){ ✓
11            int val = Character.getNumericValue(ch);
12            val = val + 100;
13            System.out.println(val);
14        }
15        else{
16            System.out.println("This is not a digit");
17        }
18    }
19 }
20 }
```

`Character.getNumericValue]` .

↳ provided by Java.

`ch = '7' → int 7`

```
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         Scanner scn = new Scanner(System.in);
8         char ch = scn.next().charAt(0);
9
10        if(ch >= '0' && ch <= '9'){
11            int val = Character.getNumericValue(ch);
12            val = val + 100;
13            System.out.println(val);
14        }
15        else{
16            System.out.println("This is not a digit");
17        }
18    }
19 }
20 }
```

Toggle the character

to convert into lower case.

```
3 {  
4     public static void main(String[] args) {  
5         char ch = 'B';  
6         System.out.println(Character.toLowerCase(ch));  
7     }
```

to convert into upper case.

```
4     public static void main(String[] args) {  
5         char ch = 'b';  
6         System.out.println(Character.toUpperCase(ch));  
7     }
```



```
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         Scanner scn = new Scanner(System.in);
8         char ch = scn.next().charAt(0);
9
10        if(ch >= 'a' && ch <= 'z'){
11            System.out.println(Character.toUpperCase(ch));
12        }else if(ch >= 'A' && ch <= 'Z'){
13            System.out.println(Character.toLowerCase(ch));
14        }
15
16    }
17 }
```

$$'F' - 'A'$$

$$70 - 65 = 5$$

$$'f' - 'a'$$

$$102 - 97 = 5$$

$$'F' - 'A' = 'f' - 'a'$$

★★

$$CH - 'A' = ch - 'a'$$

$$\left\{ \begin{array}{l} CH = ch - 'a' + 'A' \\ ch = CH - 'A' + 'a' \end{array} \right.$$

```
4 public class Solution {  
5  
6     public static void main(String[] args) {  
7         Scanner scn = new Scanner(System.in);  
8         char ch = scn.next().charAt(0);  
9  
10        if(ch >= 'a' && ch <= 'z'){  
11            System.out.println((char)(ch - 'a' + 'A'));  
12        }else if(ch >= 'A' && ch <= 'Z'){  
13            System.out.println((char)(ch - 'A' + 'a'));  
14        }  
15  
16    }  
17 }
```

String Concatenation (+)

joining.

```
2 public class Main
3 {
4     public static void main(String[] args) {
5         String s1 = "Aman";
6         String s2 = "Srivastava";
7
8
9         System.out.println(s1 + s2);
10    }
11 }
12
```

```
1 public class Main
2 {
3     public static void main(String[] args) {
4         String s1 = "Geekster";
5         int val = 20;
6
7         String ans = s1 + val;
8
9         System.out.println(ans);
10    }
11 }
12
```

```
1 public class Main
2 {
3     public static void main(String[] args) {
4         String s1 = "Geekster";
5         char ch = '@';
6
7         String ans = s1 + ch;
8
9         System.out.println(ans);
10    }
11 }
12
13
```

String length ≥ 4 \rightarrow charAt(3)

else small string.

" g o o d "

0 1 2 3

?

✓
Class
↳ data member

length in Array
length() in String

Language: Java 8

```
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         Scanner scn = new Scanner(System.in);
8         String s = scn.next();
9
10        if(s.length() >= 4){
11            System.out.println(s.charAt(3));
12        }else{
13            System.out.println("Small string");
14        }
15    }
16 }
```

```
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         Scanner scn = new Scanner(System.in);
8         String s = scn.next();
9         String r = scn.next();
10
11         System.out.println(s + r);
12
13
14     }
15 }
```

string concatenate 2

Problem

Submissions

Leaderboard

Discussions

Given 2 strings, **s1** and **s2**, return a string of the form **short+long+short**, with the **shorter** string on the **outside** and the **longer** string on the **inside**. The strings will not be the same length, but they may be empty (length 0).

eg 1. $s1 \rightarrow hi$
 $s2 \rightarrow good$

hi good hi

eg 2. $s1 \rightarrow bye$
 $s2 \rightarrow hi$

hi bye hi


```
1 import java.io.*;
2 import java.util.*;
3
4 public class Solution {
5
6     public static void main(String[] args) {
7         Scanner scn = new Scanner(System.in);
8         String s1 = scn.next();
9         String s2 = scn.next();
10
11         if(s1.length() > s2.length()){
12             System.out.println(s2 + s1 + s2);
13         }else{
14             System.out.println(s1 + s2 + s1);
15         }
16     }
17 }
18 }
```

loop.