

Class	Method	Brief explanation	Example
String			
<code>String a = "HELLO"; String b = "hello";</code>			
String	<code>equals()</code>	Determine if two strings are the same or not. Returns a boolean value.	<code>a.equals(b)</code> returns false
	<code>charAt()</code>	Returns the character at a specific position within a string.	<code>a.charAt(3)</code> returns 'L'
	<code>length()</code>	Returns the length of a string.	<code>a.length()</code> returns 5
Scanner			
Create a scanner for System.in: <code>Scanner kb = new Scanner(System.in);</code>			
Scanner	<code>next()</code>	Returns the next token from the scanner as a String value.	<code>kb.next()</code>
	<code>nextInt()</code>	Returns the next token from the scanner as an int value.	<code>kb.nextInt()</code>
	<code>nextLine()</code>	Returns the next line from the scanner as a String value.	<code>kb.nextLine()</code>

1. Show the output from each `println` statement on the right hand side, next to the `println`.

```

public class Program1{
    public static void main(String args[]){
        System.out.println( "1+2+3"+1+2+3);
        System.out.println( 67 % 10 % 10);
        System.out.println( 5*2/2*2);
        System.out.println( 654 / 10 / 10 );
        String s = "aabbcc";
        String sr= "";
        for (int i=s.length()-1; i>=0; i--){
            sr = sr+s.charAt(i);
        }
        System.out.println(sr);
        sr= "";
        for (int i=0; i<s.length(); i++){
            sr = sr+s.charAt(i);
        }
        System.out.println(sr);
        int k=0;
        for (int i=0; i < 5; i++) {
            for (int j=0; j < i; j++) {
                k++;
            }
        }
        System.out.println( k );
        int number = 123;
        int sum = 0;
        while (number > 0) {
            sum = sum + number % 10;
            number = number / 10;
        }
        System.out.println( sum );
        System.out.println( (5>7)?"Y":"N" );
        sum = 0;
        int m = 0;
        do {
            sum = sum + m;
            m++;
        } while (m<5);
        System.out.println(sum);
    }
}

```

2. **Complete** the following program so it prompts the user for a line of text and then displays the line in reverse.

For instance if the input provided by the user is **Good Day** then the program would display **yaD dooG**

```
import java.util.Scanner;
public class Program2 {
    public static void main(String[] args) {
        Scanner kb = new Scanner(System.in);
```

3. **Complete** the following program so it prompts the user for 3 integers and displays the smallest of the 3 numbers. For instance if the user provided 7 4 and 12, then the program would display 4.

```
import java.util.Scanner;
public class Program3{
    public static void main(String[] args) {
        Scanner kb = new Scanner(System.in);
```

4. Complete the program below so it prompts the user for the Hotel and Room Type via JOptionPane, and then displays the price of the corresponding room according to the table below. Show the result in a dialog box.

Hotel	Room Type	Price in Dollars
Romodo	S	100
Romodo	D	120
Romodo	K	130
Haven Inn	S	90
Haven Inn	D	100
Haven Inn	K	120

```
import javax.swing.JOptionPane;
public class Program2 {
    public static void main(String[] args) {
```