

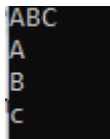
1. **Print** - This method prints the text on the console and the cursor remains at the end of the text at the console.

Println - This method prints the text on the console and the cursor remains at the start of the next line at the console.

Example

```
class Example{
    public static void main(String args[]){
        System.out.print("A");
        System.out.print("B");
        System.out.println("C");
        System.out.println("A");
        System.out.println("B");
        System.out.println("c");
    }
}
```

output



```
ABC
A
B
c
```

2.

```
class Example{
    public static void main(String args[]){
        System.out.println("M.G.Isuru Prabhath");
        System.out.println("No 87/8 Udawela,");
        System.out.println("Newtown,");
        System.out.println("polonnaruwa.");
    }
}
```

3. Java literals – It is a medium of expressing particular values in the program

Java Literals Types

1.Integer Literals

```
class Example{
    public static void main(String args[]){
        System.out.println(100); // Print 100 Decimal
        System.out.println(0144); // Print 100 octal
        System.out.println(0b1100100); // Print 100 Binary
        System.out.println(0x64); // Print 100 Hexadecimal
    }
}
```

2.Floating Point Literals

```
class Example{
    public static void main(String args[]){
        System.out.println(0.237);
        System.out.println(1.272);
        System.out.println(.072);
        System.out.println(1273.4e2);
    }
}
```

3.Boolean Literals

```
class Example{
    public static void main(String args[]){
        boolean b=10>7;
        System.out.println(b); //Print true
    }
}
```

4.Character Literals

```
class Example{
    public static void main(String args[]){
        char ch ='I';
        System.out.println(ch); //Print I
    }
}
```

4.

```
class Example{
    public static void main(String args[]){

        System.out.println(" * ");
        System.out.println(" *  * ");
        System.out.println(" *  *  * ");
        System.out.println(" *  *  *  * ");
        System.out.println(" *  *  *  *  * ");
    }
}
```

5.

```
class Example{
    public static void main(String args[]){

        System.out.println(" * ");
        System.out.println(" * * ");
        System.out.println(" * * * ");
        System.out.println(" * * * * ");
        System.out.println(" * * * * * ");
    }
}
```

6.

```
class Example{
    public static void main(String args[]){

        System.out.println("  *  ");
        System.out.println(" * * ");
        System.out.println("* * *");
        System.out.println(" * * ");
        System.out.println("  *  ");
    }
}
```

7.

```
class Example{
    public static void main(String args[]){
        int i,age;
        i=100;
        age=20;
        System.out.println("The age is "+age);
    }
}
```

8.

```
import java.util.Scanner;
class Example{
    public static void main(String args[]){
        Scanner input=new Scanner(System.in);
        int a,b,c;
        System.out.print("Enter number 1 :");
        a=input.nextInt();
        System.out.print("Enter number 2 :");
        b=input.nextInt();
        c=a+b;
        System.out.println(a+"+"+b+"="+c);
    }
}
```

9.

```
class Example{
    public static void main(String[] args){
        int x,y;
        x=10;
        y=20;
        System.out.println(x+" "+y);

        System.out.println(y+" "+x);
    }
}
```

10.

```
import java.util.Scanner;
class Example{
    public static void main(String[] args){
        Scanner input=new Scanner(System.in);
        int x,y;
        System.out.print("Input Value one :");
        x=input.nextInt();
        System.out.print("Input Value two :");
        y=input.nextInt();

        System.out.println("Values are "+x+" and "+y);
    }
}
```

11.

```
class Example{
    public static void main(String[] args){
        int Computing,Maths,Science,English;
        Computing = 90;
        Maths = 85;
        Science = 70;
        English = 55;

        int Total;
        Total= Computing+Maths+Science+English;
        System.out.println("The Total is : "+Total);

        System.out.print("The Total is : ");
        System.out.println(Computing+Maths+Science+English);
        System.out.println(Computing+" "+Maths+" "+Science+" "+English);

        double average;
        average=Total/4;
        System.out.println("The Average is : "+average);
    }
}
```

12.

```
import java.util.Scanner;
class Example{
    public static void main(String[] args){
        Scanner input=new Scanner(System.in);
        double x,y;
        System.out.print("Input Inch: ");
        x=input.nextDouble();
        y=x*25.4;
        System.out.println(x+" inch"+" = "+y+" mm");
    }
}
```

13.

```
import java.util.Scanner;
class Example{
    public static void main(String[] args){
        Scanner input=new Scanner(System.in);
        double x,y;
        System.out.print("Input ounce : ");
        x=input.nextDouble();
        y=x*28.3495;
        System.out.println(x+"oz"+" = "+y+"g");
    }
}
```

14.

```
import java.util.Scanner;
class Example{
    public static void main(String args[]){
        Scanner input=new Scanner(System.in);
        int x;
        System.out.print("Input age : ");
        x=input.nextInt();
        x=x+3;
        System.out.println("New age is : "+x);
    }
}
```

15.

```
class Example{
    public static void main(String[] args){
        int a=34,b=45,c=62,d=34,e=23,f=89,g=56,h=45,i=67,j=56,x;
        x=a+b+c+d+e+f+g+h+i+j;
        double y;
        y=x/10.0;
        System.out.println("Total is : "+x);
        System.out.println("Average is : "+y);
    }
}
```

16.

D. X=200

Since X is printed, X must be given a value, Since the value of X is printed, X must be given a value

17. C. int x=10, y=20;
Since the value of x and y is printed, we need to create variables for x and y and assign values to them.

18.

```
A
BCD
EF
G
H
```

19. Compile error

```
javac "Example.java" (in directory: D:\PROGRAMMING\JAVA)
Example.java:2: error: <identifier> expected
public static void main(String args[]){
    ^
1 error
Compilation failed.
```

After

```
60
10+20+30
10+2030
102030
102030
3030
102030
```

20. Line 1 valid
Line 2 valid
Line 3 invalid
Line 4 valid
Line 5 invalid
Line 6 valid
Line 7 valid
Line 8 invalid
Line 9 invalid
Line 10 valid

21. A. int sum,x;
B. x=1;
C. sum=0;
D. sum=x+sum;
E. System.out.println("The sum is : "+sum);

22.

```
class Example{
public static void main(String args[]){
    System.out.println("Java is a typed language");
    System.out.println("AB"+"\""+"CB");
    System.out.println("AB\\CD");
    System.out.println("C:\\Windows\\program");
    System.out.println("AB\\"+"'"+"CD");
    System.out.println("AB\\\\"+"'"+"'"+"CD");
    System.out.println("AB\\"+"n"+"CD");
    System.out.println("AB\\"+"t"+"CD");
    System.out.println("AB\\"+"b"+"CD");

}
}
```

23. B. x=100
Since the value of x is printed, x must be given a value

24.

```
class Example{
    public static void main(String[] args){
        System.out.println("ABC\nXYZ\nPQR");

    }
}
```

25.

Compile error

```
javac "Example.java" (in directory: D:\PROGRAMMING\JAVA)
Example.java:7: error: variable y is already defined in method main(String[])
    int y=200;
        ^
    1 error
Compilation failed.
```

Variable y is already used

After

```
10 class Example{
20 public static void main(String args[]){
30     int x=10,y=20,z=30;
    System.out.println(x);
    System.out.println(y);
    System.out.println(z);
    y=200;
    System.out.println(y);
    }
}
```

26.

```
class Example{

    public static void main(String args[]){
        System.out.println("| '+' + '/' + '+' + '\\ '+' + '/' + '+' + '\\ '+' + '/' + '|' );

    }

}
```

27.

```
class Example{

    public static void main(String args[]){
        System.out.println(' '+' '+' + '\\ '+' '+' + '/' + '+' + '+' + '+' + '+' + '+' + '+' + '+' + '\\ '+'n' + '+' + '+' + '+' + '+' + '+' + '\\ '+'n' + '+' );

    }

}
```

28.

```
class Example{

    public static void main(String []args){
        System.out.println("Name      : Niroth \nTotal      : 673 \nAverage : 67.3 \nGrade      : B");

    }

}
```

29.

- A. char a = '\u0061';
- C. cha \u0061 = 'a';
- D. ch\u0061r a = 'a';

30.

- D. Compile error at line 6

31. a b c g

32. e. Compile-time error

33. e. Compile time error

34. d. When run, the program will print 34

35. f. None of the above

36. A. 6 - All Integers
B. 123 - All Character
C. 150 – ASCII value of digits 1-49/ 2-50/ 3-51
D. 1 2 3 -Two are in the middle of the string and the other is converted to a string
E. 198 – ASCII value of character A-65/ B-65/ C-67
F. ABC - All Character
G. 365 - A character ASCII value is 65 (65+100+200=365)
H. A B C -Two are in the middle of the string and the other is converted to a string

37. char a='a'; - variable a stores a lowercase a character

System.out.println(a=="\u0061"); - in UTF lowercase a character is represented as [\u0061](#)

System.out.println("\u0061=="\u0061"); - \u0061 value is unquoted so it's [decoded into](#)
[Lowercase a during compilation](#) making it a=="\u0061",

System.out.println("\u0061==97"); - same as above because 97dec = 61hex except here we are not using UTF notation to represent character, instead we use numerical value of char

\u0061='\u0041'; - a variable assigned value of [\u0041](#) which is uppercase A

System.out.println('A'=="\u0041"); in UTF lowercase A character is represented as '\u0041'

System.out.println(65=="\u0041"); - - 65dec = 41hex, here we are comparing two constants, not the a variable

System.out.println(65==a); - - 65dec = a,

System.out.println("\u0041'==a); - - a = 41hex

38.

- a. System.out.println(0B1010); 10
- c. System.out.println(0B01010); 10
- d. System.out.println(01010); 520
- e. System.out.println(0x1010); 4112
- f. System.out.println(01012); 522

39.

```
import java.util.*;
class Example{
    public static void main(String args[]){
        Scanner input=new Scanner(System.in);
        System.out.print("Input your age : ");
        int age=input.nextInt();
        System.out.println("Your current age is : "+age);
        age=age+10;
        System.out.println("Your age after 10 years is : "+age);
    }
}
```

40.

```
import java.util.*;
class Example{
    public static void main(String args[]){
        Scanner input=new Scanner(System.in);
        System.out.print("Input number 1 : ");
        int num1=input.nextInt();
        System.out.print("Input number 2 : ");
        int num2=input.nextInt();
        System.out.println(num1+" "+num2);
        num2=num1+num2;
        num1=num2-num1;
        num2=num2-num1;
        System.out.println(num1+" "+num2);
    }
}
```