

## 1. Write a Java Program To get the Input of the User.

Input:

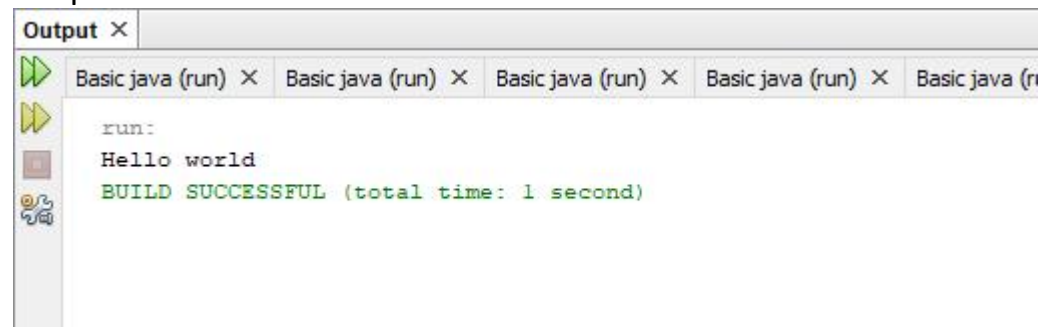
package executionsteps;

```
/**
 *
 * @author Asus
 */
public class ExecutionSteps {

    public static void main(String[] args) {
        System.out.println("Hello world");
    }

}
```

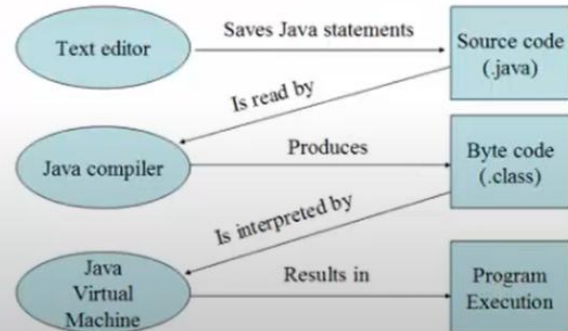
Output:



# Java's Phases / execution steps

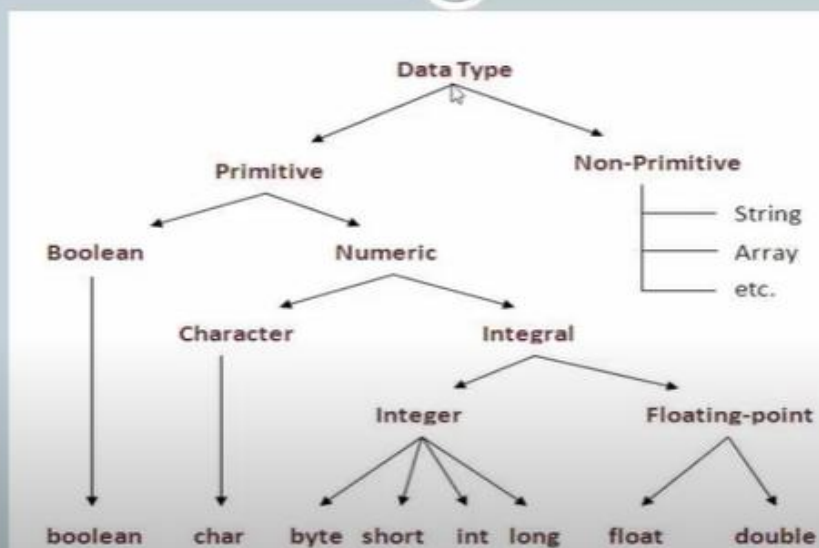
1. Edit
2. Compile
3. Load
4. Verify
5. Execute

## Program Development Process



## Data type in Java

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Type Name	Description	Size	Range	Sample Declaration & Initialization
boolean	true or false	1 bit	{true, false}	boolean myBool = true;
char	Unicode Character	2 bytes	u0000 to uFFFF	char myChar = 'a';
byte	Signed Integer	1 byte	-128 to 127	int myInt = 100;
short	Signed Integer	2 bytes	-32768 to 32767	short myShort = 1000;
int	Signed Integer	4 bytes	-2147483648 to 2147483647	int myInt = 100000;
long	Signed Integer	8 bytes	-9223372036854775808 to 9223372036854775807	long myLong = 0;
float	IEEE 754 floating point	4 bytes	$\pm 1.4\text{E}-45$ to $\pm 3.4028235\text{E}+38$	float myFloat = 10.0f;
double	IEEE 754 floating point	8 bytes	$\pm 4.9\text{E}-324$ to $\pm 1.7976931348623157\text{E}+308$	double myDouble = 20.0;

2. Write a Java Programme To Find the Value of the Data type input from the user.

Input:

```
/*
 * To change this license header, choose License Headers in Project
Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
```

```
package executionsteps;
```

```
/**
 *
 * @author Asus
 */
```

```
public class DataType {
    public class data type {
```

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

```
boolean b = true;
char c = 'a' ;
short s = 32444;
int i = 123456;
float f = 10.2f;
double d = 10.5;
```

```

System.out.println("boolean b = "+b);
System.out.println("c = "+c);
System.out.println("s = "+s);
System.out.println("i = "+i);
System.out.println("f = "+f);
System.out.println("d = "+f );
}
}

```

Output:

```

boolean b = true
c = a
s = 32444
i = 123456
f = 10.2
d = 10.2
BUILD SUCCESSFUL (total time: 0 seconds)

```

Assignment 01 :

```

1  /*
2   * Assignment-1
3   * create a class called Product
4   * create a main method
5   * print the following data in main method
6
7
8   id: 101,
9   title: iphone15,
10  price: 1895 euros,
11  description: perfect product with best image quality,
12  category: phone,
13  */

```

Solution :

Input:

/\*

\* To change this license header, choose License Headers in Project Properties.

\* To change this template file, choose Tools | Templates

\* and open the template in the editor.

```

*/
package practisejava;

/**
 * @author Asus
 */
public class Assignment01 {

    public static void main(String [] args){

        System.out.println("Id:101");
        System.out.println("title : iphone 15");
        System.out.println("price 1885 euros");
        System.out.println("description : perfect product image quality");
        System.out.println("category : phone ");

    }

}

```

### Output:

```

run:
Id:101
title : iphone 15
price 1885 euros
description : perfect product image quality
category : phone
BUILD SUCCESSFUL (total time: 1 second)

```

### Assignment 02:

```

1  /*
2   * Assignment-2 (Variable and Data type)
3   * step 1: create a class called Product
4   * step 2: create a main method
5   * step 3: declare variables: id, title, price, description, category
6   * step 4: assign the following data in main method
7   101,iphone15,1895 euros,perfect product with best image quality, phone,
8   * step 5: print the data
9   */

```

Solution:

Input:

```
package practisejava;
```

```
/**
```

```
*
```

```
* @author Asus
```

```
*/
```

```
public class Assignment02 {
```

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

```
        int id = 101;
```

```
        String title = "iphone 15";
```

```
        String price = " 1895 auros ";
```

```
        String description = "Product with best image quality";
```

```
        String category = "phone";
```

```
        System.out.println(" id is : +id ");
```

```
        System.out.println("Title is : +title ");
```

```
        System.out.println("price : +price ");
```

```
        System.out.println("description : +description ");
```

```
        System.out.println("category : +category");
```

```
    }
```

```
}
```

Input:

```

run:
  id is : +id
  Title is : +title
  price : +price
  description : +description
  category : +category
BUILD SUCCESSFUL (total time: 0 seconds)

```

3. Write a Java Programme to get the input from the user using format specifier.

Input:

```

/*
 * To change this license header, choose License Headers in Project
Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */

```

```

package executionsteps;

```

```

/**
 *
 * @author Asus
 */
public class DataType {
    public class data type {

```

```

public static void main(String [] args) {

```

```

boolean b = true;
char c = 'a' ;
short s = 32444;
int i = 123456;
float f = 10.2f;
double d = 10.5;

```

```

System.out.printf("boolean b = %b\n",b);
System.out.printf(" Characetr c = %c\n",c);
System.out.printf("short s = %d\n",s);
System.out.printf(" integer i = %d\n",i);
System.out.printf(" float f = %f\n",f);
System.out.printf(" double d = %f\n",d);

```

```
}  
}
```

Output:

```
run:  
boolean b = true  
Character c = a  
short s = 32444  
integer i = 123456  
float f = 10.200000  
double d = 10.500000  
BUILD SUCCESSFUL (total time: 0 seconds)
```

4. Write a Java Programme to get the input from the user.

Input:

ackage beginnerjava;

import java.util.Scanner;

public class Inputdemo {

public static void main(String []args){

Scanner input = new Scanner(System.in);  
int number;

System.out.println ("Enter any number : ");  
number = input.nextInt();

System.out.println ("Number = "+number);

}

}



Output:

```
Enter any number :  
111  
Number = 111  
BUILD SUCCESSFUL (total time: 5 seconds)
```

5. Write a Java Programme to get the user from the input.

Input:

```
package begginnerjava;  
  
import java.util.Scanner;  
  
public class Inputdemo {  
  
    public static void main(String []args){  
  
        Scanner input = new Scanner(System.in);  
        String name;  
        System.out.println("Enter Your name : ");  
  
        name = input.next();  
  
        System.out.println("Welcome :"+name);  
  
    }  
  
}
```

Output:

```
run:
Enter Your name :
OSIHEE
Welcome :OSIHEE
BUILD SUCCESSFUL (total time: 4 seconds)
```

6. write a java programme using double vaule.

Input:

```
package beginnerjava;
```

```
import java.util.Scanner;
```

```
public class Inputdemo {
```

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

```
        Scanner input = new Scanner(System.in);
```

```
        double num1;
```

```
        System.out.println("Enter any double vaule : " );
```

```
        num1 = input.nextDouble();
```

```
        System.out.println("num1");
```

```
    }
```

```
}
```

Output:

```
run:
Enter any double vaule :
111
num1
BUILD SUCCESSFUL (total time: 10 seconds)
```

## Assignment 03

```
1  /*
2   * Assignment-3 (User Input)
3   * step 1: create a class called Product
4   * step 2: create a main method
5   * step 3: declare variables: id, title, price, description, category
6   * step 4: get user input for each variables
7   * step 5: print the variables
8   */
```

Input:

```
package practisejava;
```

```
/**
```

```
*
```

```
* @author Asus
```

```
*/
```

```
public class Assignment03 {
```

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

```
        Scanner sc = new Scanner(System.in);
```

```
        Scanner input = new Scanner(System.in);
```

```
        String id;
```

```
        String title;
```

```
        int Price;
```

```
        String Description;
```

```
        String Category;
```

```
        System.out.print("Enter the id: ");
```

```
        id = input.nextLine();
```

```
        System.out.print("Enter the title: ");
```

```
        title = input.nextLine();
```

```
        System.out.print("Enter the Price: ");
```

```
        Price = sc.nextInt();
```

```
        System.out.print("Enter the Description: ");
```

```
        Description = input.nextLine();
```

```
        System.out.print("Enter the Category: ");
```

```
        Category = input.nextLine();
```

```
        System.out.println("Your id is: "+id);
```

```
System.out.println("The title is: "+title);  
System.out.println("The price is: "+Price);  
System.out.println("The description is: "+Description);  
System.out.println("The category is:: "+Category);
```

```
    }  
}
```

Output:

## Assignment Operator

Assignment Operator	Example	Full meaning
=	y = x + 5 ;	
+=	x += 5 ;	x = x + 5 ;
-=	x -= y ;	x = x - y ;
*=	x *= 5 ;	x = x * 5 ;
/=	x /= 5 ;	x = x / 5 ;
%=	x %= 5 ;	x = x % 5 ;

7. Write a Java Programme to find Assignment Operator.

Input:

```
package beginnerjava;
```

```
public class AssignmentOperator {
```

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

```
        int x = 3;
```

```
        int y = 2;
```

```
        x+=y; //x=x+y=5
```

```
        System.out.println("x = "+x);
```

```
        x-=y; //x=x-y=3
```

```
        System.out.println("x = "+x);
```

```
        x*=y; //x=x*y=6
```

```
        System.out.println("x = "+x);
```

```
        x/=y; //x=x/y=3
```

```
        System.out.println("x = "+x);
```

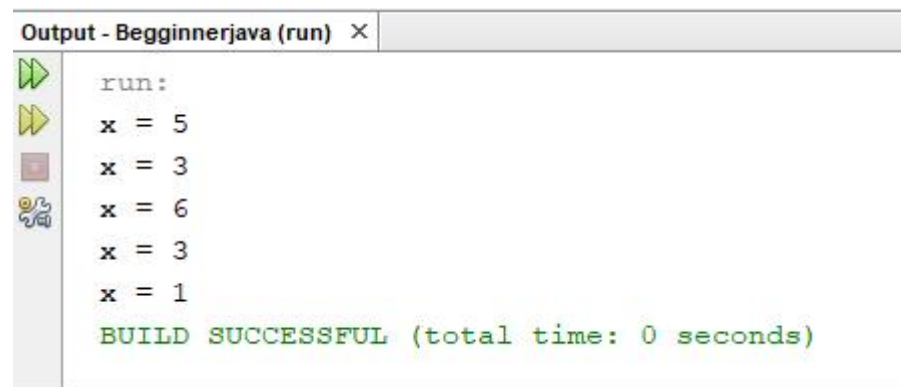
```

x%=y; //x=x%y=1
System.out.println("x = "+x);

}
}

```

Output:



```

Output - Begginerjava (run) ×
run:
x = 5
x = 3
x = 6
x = 3
x = 1
BUILD SUCCESSFUL (total time: 0 seconds)

```

## Assignment 04

```

1  import java.util.Scanner;
2  // Create a program to calculate installment amount for per month
3  public class Assignment4 {
4      public static void main(String[] args) {
5
6          try (Scanner input = new Scanner(System.in)) {
7              int phonePrice = 1800; // 1800 euros
8              int numberOfInstallment, installmentPerMonth;
9
10             System.out.print("Number of installments? ");
11             // get number of installments from user
12
13
14             // calculate installment amount for per month

```

Input:

```
import java.util.Scanner;
// Create a program to calculate installment amount for
per month
public class Assignment4 {
    public static void main(String[] args) {

        (Scanner input = new Scanner(System.in)) {
            int phonePrice = 1800; // 1800 euros
            int numberOfInstallment, installmentPerMonth;

            System.out.print("Number of installments? ");
            // get number of installments from user

            // calculate installment amount for per month

            System.out.println("Monthly installment Amount:
            "+installmentPerMonth + " euros");
        }
    }
}
```

8. Write a Java Programme To Convert Farenheit To Celcius.

Input:

```
package beginnerjava;
```

```
public class TemperatureConvertDemo {
```

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

```
    Scanner input = new Scanner (System.in);  
    double cels,farn;
```

```
    System.out.print("Celsius = ");  
    cels = input.nextDouble();
```

```
    farn = 1.8 * cels + 32;
```

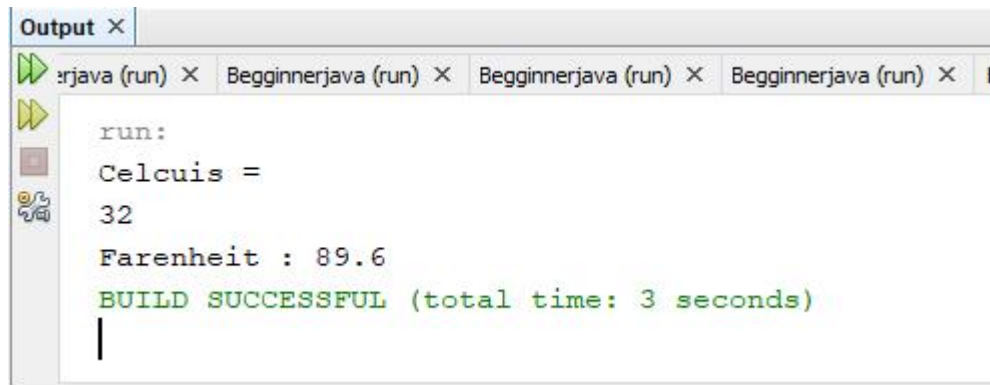
```
    System.out.println("Farenheit : "+farn);
```

```
}
```

```
}
```

Output:





```
Output X
run:
Celcuis =
32
Farenheit : 89.6
BUILD SUCCESSFUL (total time: 3 seconds)
```

8. Write a Java Programme To Convert Celcius To Farenheit.

Input:

```
package begginnerjava;
```

```
import java.util.Scanner
```

```
public class TemperatureConvert {
```

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

```
        Scanner input = new Scanner(System.in);
        double farn,cels;
```

```
        System.out.print("Farenheit = ");
        farn = input.nextDouble();
```

```
        cels = (farn - 32)/1.8;
```

```
        System.out.println("Celcuis : "+cels);
```

```
}  
  
}
```

Output:

```
run:  
Farenheit = 31  
Celcuis : -0.5555555555555556  
BUILD SUCCESSFUL (total time: 2 seconds)
```

9. Write a Java Programme To fiund the Area Of a Triangle.

Input:

```
package begginnerjava;
```

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

```
        Scanner input = new scanner(System.in);  
        double base,height,area;
```

```
        System.out.print("Enter base = ");  
        base = input.nextDouble();
```

```
        System.out.print("Enter height = ");  
        height = input.nextDouble();
```

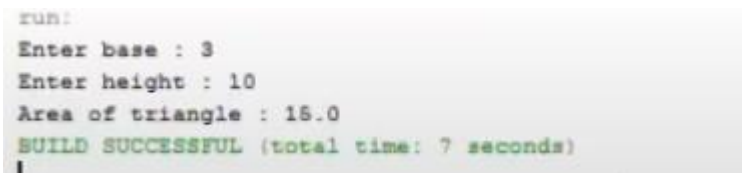
```
        area = 0.5 * base * height;
```

```
        System.out.println("Area of a Triangle :"+area);

    }

}
```

Output:



```
run:
Enter base : 3
Enter height : 10
Area of triangle : 15.0
BUILD SUCCESSFUL (total time: 7 seconds)
|
```

10. Write a Java Programme To find the Area Of a Rectangular.

Input:

```
package begginnerjava;
```

```
public class AreaofaRectangularTriangle {
```

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

```
        Scanner input = new Scanner(System.in);
        double length,width,area;
```

```
        System.out.print("Enter length : ");
        length = input.nextDouble();
```

```
        System.out.print("Enter width : ");
        width = input.nextDouble();
```

```
        area = length * width ;
```

```

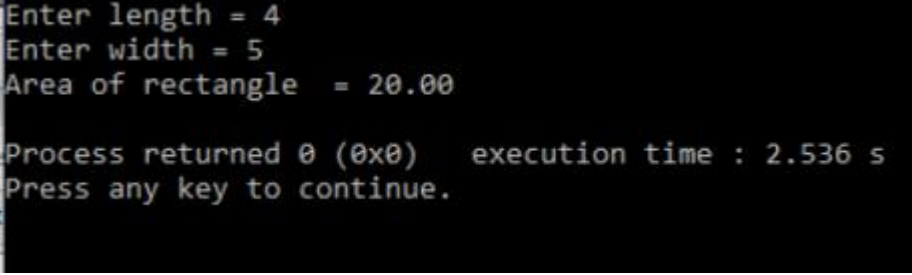
        System.out.println("Area of rectangular : "+area);

    }

}

```

Output:



```

Enter length = 4
Enter width = 5
Area of rectangle = 20.00

Process returned 0 (0x0)   execution time : 2.536 s
Press any key to continue.

```

11. Write a Java Programme To find the Area Of a Circle.

Input:

```
package beginnerjava;
```

```

public class AreaofaRectangularCircle {

    public static void main(String[] args){

        Scanner input = new Scanner(System.in);
        double radius,area;

        System.out.print("Enter radius : ");
        radius = input.nextDouble();
    }
}

```

```

        area = radius * radius * 3.1416 ;

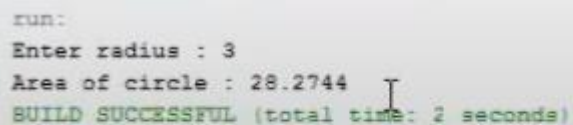
        System.out.println("Area of circle : "+area);

    }

}

```

Output:



```

run:
Enter radius : 3
Area of circle : 28.2744
BUILD SUCCESSFUL (total time: 2 seconds)

```

12. Write a Java Programme To Find the Area Of a Square.

Input:

```
package beginnerjava;
```

```

public class Areaofasquare {

    public static void main(String[] args){

        Scanner input = new Scanner(System.in);
        double radius,area;

        System.out.print("Enter radius : ");
        radius = input.nextDouble();

        area = a *a ;
    }
}

```

```
        System.out.println("Area of square : "+area);

    }

}
```

Output:

```
Enter any vaule of a : 4
Area = 16.000000

Process returned 0 (0x0)   execution time : 1.837 s
Press any key to continue.
```