

JAVA PROGRAM EXAMPLE WITH OUTPUT PDF

pTutorial

Created By:
Umar Farooque Khan

How to compile and run java programs

Compile: - javac JavaFileName

Run Java: - java JavaClassName

Let's take an example of java program:

//Hello.java

```
class Hello
{
    public static void main(String args[])
    {
        System.out.println("Welcome to Java!");
    }
}
```

Compile: - javac Hello.java

Run Java: - java Hello

Program No. – 01

Write a program to print hello in java.

```
class Hello
{
    public static void main(String args[])
    {
        System.out.println("Welcome to Java!");
    }
}
```

Output:-



```
CA. C:\Windows\system32\CMD.exe
D:\java>javac Hello.java
D:\java>java Hello
Welcome to Java!
D:\java>
```

Program No. – 02

Write a program for object and class in java.

```
class Rectangle
{
    private int l,b;
    public void setDimension(int x,int y)
    {
        l=x;
        b=y;
    }

    public int area()
    {
        return l*b;
    }
    public void display()
    {
        System.out.println("Length="+l);
        System.out.println("Breadth="+b);
    }
    public static void main(String ac[])
    {
        Rectangle r=new Rectangle();
        r.setDimension(5,10);
        r.display();
        System.out.println("Area="+r.area());
    }
}
```

Output:



```
C:\Windows\system32\CMD.exe
D:\java>javac Rectangle.java
D:\java>java Rectangle
Length=5
Breadth=10
Area=50
D:\java>
```

Program No. – 03

Write a program to explain the concept of this keyword in java.

```
class ThisTest
{
    int id;
    String name;

    ThisTest(int id, String name)
    {
        this.id = id;
        this.name = name;
    }
    void display()
    {
        System.out.println(id + " " + name);
    }

    public static void main(String args[])
    {
        ThisTest s1 = new ThisTest(142, "Shamshad");
        ThisTest s2 = new ThisTest(452, "John");
        s1.display();
        s2.display();
    }
}
```

Output:-



```
C:\Windows\system32\CMD.exe

D:\java>javac ThisTest.java
D:\java>java ThisTest
142 Shamshad
452 John
D:\java>
```

Program No. – 04

Write a program to explain the concept of super keyword in java.

```
class Bike
{
int speed=50;
}

class Super extends Bike
{
    int speed=100;

    void display()
    {
System.out.println(super.speed);
    }
    public static void main(String args[])
    {
        Super b=new Super();
        b.display();
    }
}
```

Output:

```
C:\Windows\system32\cmd.exe
F:\shahid>javac Super.java
F:\shahid>java Super
50
F:\shahid>
```

Program No. – 05

Write a program for overloading in java.

```
class Overloading
{
    void sum(inta,int b)
    {
        System.out.println(a+b);
    }

    void sum(double a,double b)
    {
        System.out.println(a+b);
    }

    public static void main(String args[])
    {
        Overloading obj=new Overloading();
        obj.sum(10.5,10.5);
        obj.sum(20,20);
    }
}
```

Output:

```
C:\Windows\system32\cmd.exe
F:\shahid>javac Overloading.java
F:\shahid>java Overloading
21.0
40
F:\shahid>
```

Program No. – 06

Write an abstract class program in java.

```
public abstract class shape
{
public abstract void calculatearea();
}
```

```
public class circle extends shape
{
private int x,y;
private int radius;
public circle()
{
x=15;
y=15;
radius=10;
}
public void calculatearea ()
{
double area=3.14*(radius*radius);
```

```
System.out.println("area="+area);  
}  
}
```

```
class test1  
{  
    public static void main(String arr[])  
    {  
shape s =null;  
  
s=new circle();  
s.calculatearea();  
    }  
}
```

Output:



```
C:\Windows\system32\CMD.exe
D:\java>javac Test1.java
D:\java>java Test1
area=314.0
D:\java>
```

Program No. – 07

Write a program and analyse its output in java.

```
class A
{
    static
    {
        System.out.println("Initilizing a..");
    }
    public A()
    {
        System.out.println("Constructor is called");
    }
}
class B
{
    static int b;
    static
    {
        b=2;
        System.out.println("I am in class B");
    }
}
class C
{
    static
```

```
    {  
        System.out.println("I am in class C");  
    }  
  
public static void display()  
    {  
        System.out.println("Displayed method is called");  
    }  
}  
class D  
{  
    static  
    {  
        System.out.println("I am in class D");  
    }  
  
    public static void main(String arr[])  
    {  
        System.out.println("main method");  
        A z=new A();  
        System.out.println("Class b is called"+B.b);  
        C.display();  
        System.out.println("helo!!");  
        A q=new A();  
    }  
}
```

Output:



```
C:\Windows\system32\CMD.exe

D:\java>javac D.java
D:\java>java D
I am in class D
main method
Initilizing a..
Constructor is called
I am in class B
Class b is called2
I am in class C
Displayed method is called
helo!!
Constructor is called
D:\java>
```

Program No. – 08**Write an Interface program in java.**

```
public interface Speaker
{
    public void speak();
}
```

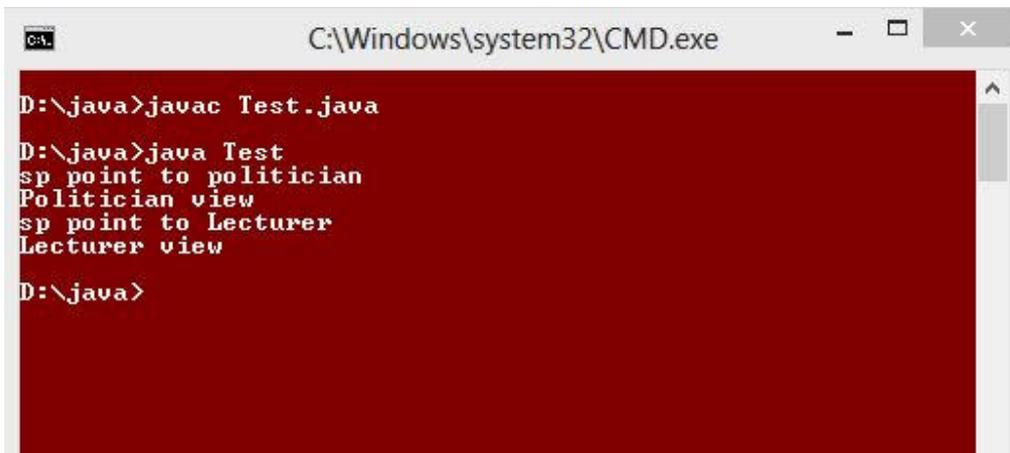
```
public class Lecturer implements Speaker
{
    public void speak()
    {
        System.out.println("Lecturer view");
    }
}
```

```
public class Politician implements Speaker
{
    public void speak()
    {
        System.out.println("Politician view");
    }
}
```

```
public class Test
{
    public static void main(String arr[])
    {
        Speaker sp=null;
        System.out.println("sp point to politician");
        sp=new Politician();
        sp.speak();

        System.out.println("sp point to Lecturer");
        sp=new Lecturer();
        sp.speak();
    }
}
```

Output:



```
C:\Windows\system32\CMD.exe

D:\java>javac Test.java

D:\java>java Test
sp point to politician
Politician view
sp point to Lecturer
Lecturer view

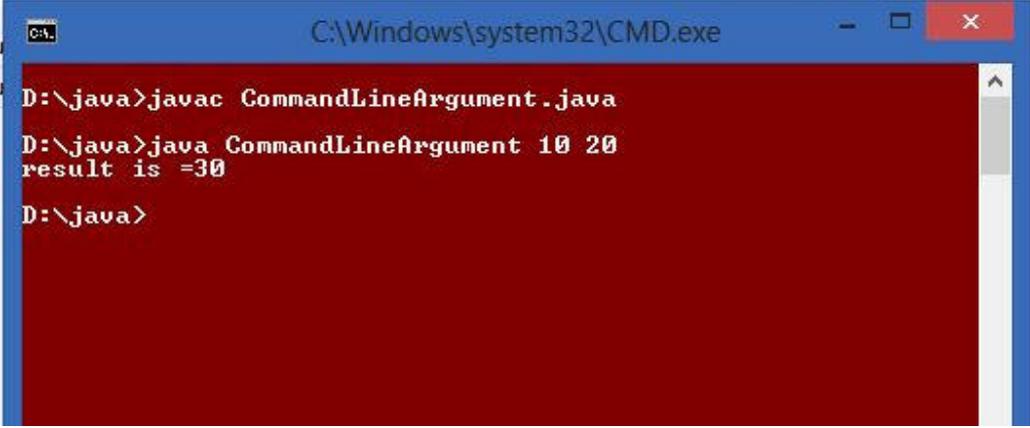
D:\java>
```

Program No. – 09

Write a program for command line argument.

```
classCommandLineArgument
{
    public static void main (String arr[])
    {
try
    {
        int a=Integer.parseInt(arr[0]);
        int b=Integer.parseInt(arr[1]);
        int sum=a+b;
        System.out.println("result is =" +sum);
    }
    catch(Exception e)
    {
        System.out.println(e);
    }
    }
}
```

Output:



```
C:\Windows\system32\CMD.exe
D:\java>javac CommandLineArgument.java
D:\java>java CommandLineArgument 10 20
result is =30
D:\java>
```

Program No. – 10**Write a program for Handling an Exception In java.**

```
classExceptionHandling
{
    public static void main(String arr[])
    {
        try
        {
            int a=Integer.parseInt(arr[0]);
            int b=Integer.parseInt(arr[1]);
            int sum = a/b;
            System.out.println("Result:"+ sum);
        }
        catch(Exception e)
        {
            System.out.println(e);
        }
    }
}
```

Output:



```
C:\Windows\system32\CMD.exe

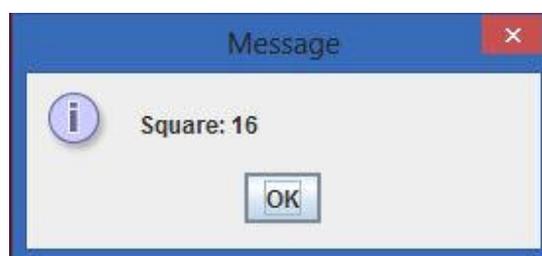
D:\java>javac ExceptionHandling.java
D:\java>java ExceptionHandling
java.lang.ArrayIndexOutOfBoundsException: 0
D:\java>java ExceptionHandling 5 2
Result:2
D:\java>java ExceptionHandling 5 0
java.lang.ArithmeticException: / by zero
D:\java>
```

Program No. – 11

Write a program to calculate square for a number using swing.

```
import java.awt.*;
import javax.swing.*;
public class InputOutput
{
    public static void main(String arr[])
    {
        String input=JOptionPane.showInputDialog("Enter a number");
        int number=Integer.parseInt(input);
        int square=number*number;
        System.out.println("square = "+square);
        JOptionPane.showMessageDialog(null,"Square: " +square);
        System.exit(0);
    }
}
```

Output:



Program No. – 12

Write a program for comparing two string in java.

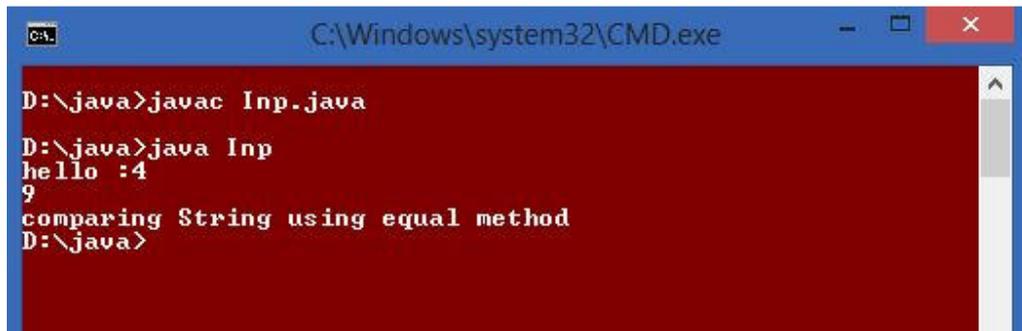
```
import java.awt.*;
import javax.swing.*;
public class Inp
{

public static void main(String arr[])
{
    int i=4,j=5;

    System.out.println("hello :"+i);
    System.out.println(i+j);
    String S1=new String ("india");
    String S2="india";
    if(S1==S2)
    System.out.print("comparing String using == operator");
    if(S1.equals(S2))
    System.out.print("comparing String using equal method");
```

```
}  
  
}
```

Output:



```
C:\Windows\system32\CMD.exe  
D:\java>javac Inp.java  
D:\java>java Inp  
hello :4  
9  
comparing String using equal method  
D:\java>
```

Program No. – 13

Write a program to handling an action event in java.

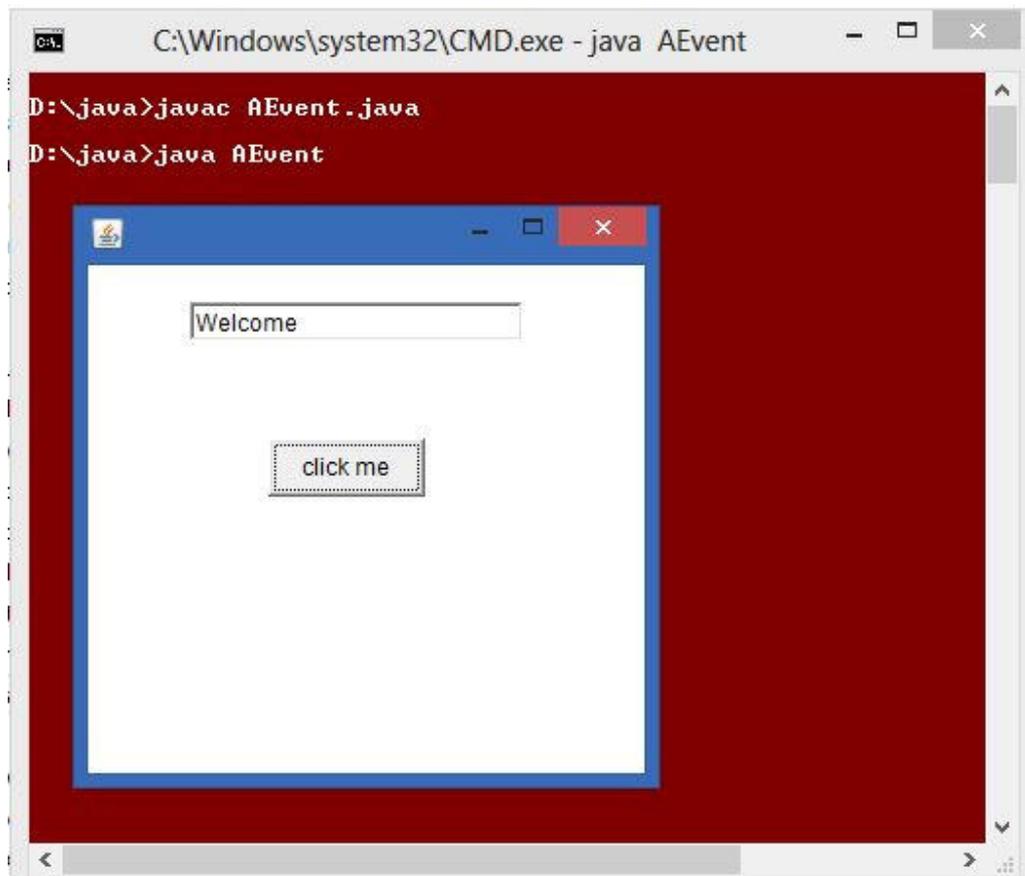
```
import java.awt.*;
import java.awt.event.*;

class AEvent extends Frame implements ActionListener
{
    TextField tf;
    AEvent()
    {
        tf=new TextField();
        tf.setBounds(60,50,170,20);
        Button b=new Button("click me");
        b.setBounds(100,120,80,30);
        b.addActionListener(this);
        add(b);
        add(tf);
        setSize(300,300);
        setLayout(null);
        setVisible(true);
    }
}
```

```
public void actionPerformed(ActionEvent e)
{
    tf.setText("Welcome");
}

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

Output:

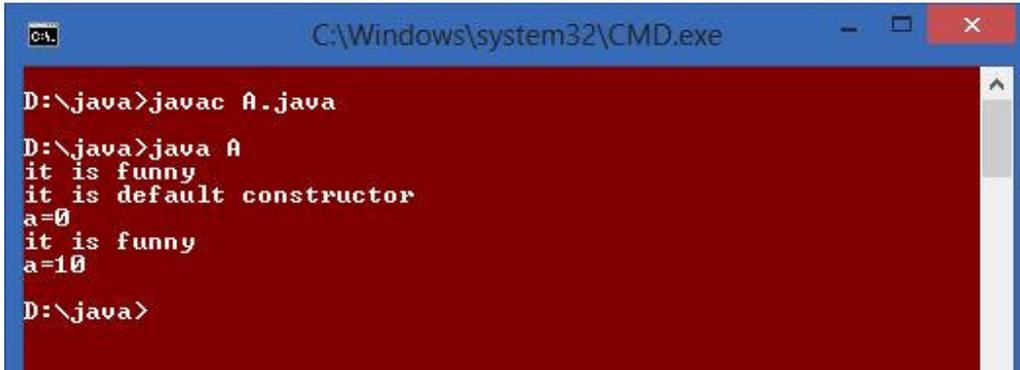


Program No. – 14**Write a program for a Constructor in java.**

```
class A
{
    int a;
    public A(int x)
    {
        a=x;
    }
    public A()
    {
        System.out.println("it is default constructor");
    }
    {
        System.out.println("it is funny");
    }
    public void display()
    {
        System.out.println("a="+a);
    }

    public static void main(String arg[])
    {
        A x=new A();
        x.display();
        A y=new A(10);
        y.display();
    }
}
```

Output:



```
C:\Windows\system32\CMD.exe
D:\java>javac A.java
D:\java>java A
it is funny
it is default constructor
a=0
it is funny
a=10
D:\java>
```

Program No. – 15

Write an Applet program to show different-different shapes in java.

```
import java.applet.Applet;
import java.awt.*;

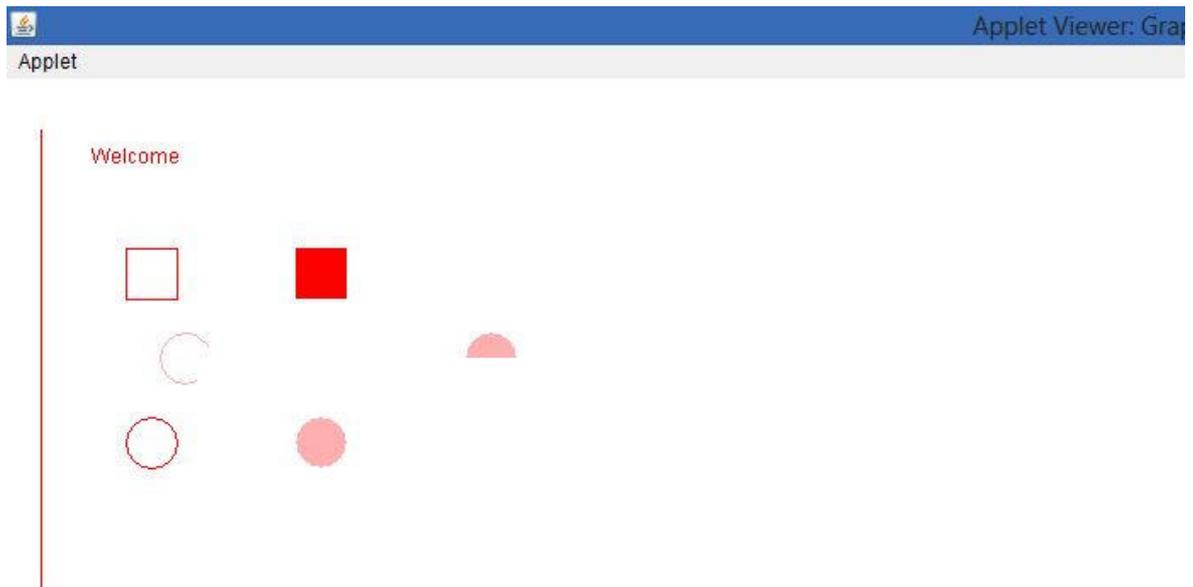
public class GraphicsDemo extends Applet
{

    public void paint(Graphics g)
    {
        g.setColor(Color.red);
        g.drawString("Welcome",50, 50);
        g.drawLine(20,30,20,300);
        g.drawRect(70,100,30,30);
        g.fillRect(170,100,30,30);
        g.drawOval(70,200,30,30);

        g.setColor(Color.pink);
        g.fillOval(170,200,30,30);
        g.drawArc(90,150,30,30,30,270);
    }
}
```

```
        g.fillArc(270,150,30,30,0,180);
    }
}
/*
<html>
<body>
<applet code="GraphicsDemo.class" width="300" height="300">
</applet>
</body>
</html> */
```

Output:



For any suggestions or request mail me at info@ptutorial.com. We will respond as soon as possible for better experience.