
```
class BoolTest {
  public static void main(String args[]) {
    boolean b;
    b = false;
    System.out.println("b is " + b);
    b = true;
    System.out.println("b is " + b);
    if(b) System.out.println("Boolean condition Test ");
    b = false;
    if(b) System.out.println("Java has beautifuol boolean feature");
    System.out.println("10 > 9 is " + (10 > 9));
  }
}
```

```
class IncDec {

  public static void main(String args[]) {
    int a = 1;
    int b = 2;
    int c;
    int d;
    c = ++b;
    d = a++;
    c++;
    System.out.println("a = " + a);
    System.out.println("b = " + b);
    System.out.println("c = " + c);
    System.out.println("d = " + d);
  }
}
```

```
class IncDec2 {
  public static void main(String args[]) {
    int a = 1;
    int b = 2;
    int c;
    int d;

    c = ++b;
    d = a++;
```

```
   c++;
   System.out.println("a = " + a);
   System.out.println("b = " + b);
   System.out.println("b = " +a+ b);
   System.out.println("b = " +a+ b++);
   System.out.println("c = " + c);
   System.out.println("d = " + d);
   System.out.println("b = " +(++c+d));
  }
}
```

```
public class Test {
  public static void main(String[] args){
     int a=16, b=7;
     System.out.println("First line: " + a + b);
     System.out.println("A =" + a + " b=" + b);
     System.out.println("A =" + "a" + "b=" +" b");
     System.out.println("A " + "–B =" + (a - b) );
     System.out.println("A =" + ++a + " b=" + b++);
     System.out.println("The last  code: " + b + a);
  }
}
```

```
class Conversion {
  public static void main(String args[]) {
    byte b;
    int i = 258;
    double d = 23.142;
    System.out.println("\nConversion of int to byte.");
    b = (byte) i;
    System.out.println("i and b " + i + " " + b);

    System.out.println("\nConversion of double to int.");
    i = (int) d;
    System.out.println("d and i " + d + " " + i);

    System.out.println("\nConversion of double to byte.");
    b = (byte) d;
    System.out.println("d and b " + d + " " + b);
  }
}
```

```
class Test{
public static void main(String args [ ]) {
int twoD[][]=new int[3][4];
int i,j,k=0;
for(i=0;i<3;i++){
  for (j=0;j<4; j++){
    twoD[i][j]=k;
    k+=10;
   }
  }
for(i=0;i<3;i++){
  for (j=0;j<4; j++)
     System.out.print(twoD[i][j]+" ");

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

```
        public class Continue2 {
                public static void main(String args[]) {
                int nums[] = { 22, 4, 3, 7, 8, 9, 10,12,13,14,16, 18,17,24 };
                  for(int i : nums) {
                       System.out.print(i + " ");
                        if (i%4 != 0)
                          continue;
                        System.out.println("#");
                        if (i==16|| i==17) break;
                  }
                }
            }
```

```
class Copntinue2 {
  public static void main(String args[]) {
      int nums[] = { 22, 4, 3, 7, 8, 9, 10,12,13,14,15,16 };
    for(int i : nums) {
      System.out.print(i + " ");
      if (i%3 == 0)
           System.out.println("");
      else continue;
      if (i==15) break;
    }
  }
}
```

```
class CallTest2 {
  int x, y;
  void CallV(int i, int j) {
    i = i+3;
    j = j-2;
    System.out.println("Expression in calcV method  is: "+ i+" " +j);
  }
  void calc(CallTest2 o) {
   System.out.println("Expression in calc method  is: "+ (o.x*3)+o.y);
    o.x += 6;
    o.y /= 7;
  }
}
class Calling2 {
  public static void main(String args[]) {
    CallTest2 ob = new CallTest2();
    ob.x=10;
    ob.y=7;
    ob.CallV(35,9);
    System.out.println("Before call 1: " + ob.x + " " + ob.y);
    System.out.println("Before call 2: " + (ob.x + ob.y));
    ob.calc(ob);
    System.out.println("after call 1: " + ob.x + " " + ob.y);
    System.out.println("after call 2: " + (ob.x + ob.y));
  }
}
```

```
class Testin {
  int a, b;

   Testin(int i, int j) {
        System.out.println("Constructor call: ");
        a = i;
        b = j;
   }
  void calc(Testin o) {
        System.out.println("Expression in calc is: "+ (o.a*2));
        o.a += 7;
        o.b /= 3;
   }
}

class CallBy {
  public static void main(String args[]) {
     Testin ob = new Testin(12, 33);

      System.out.println("call 1: " + ob.a + " " + ob.b);
      System.out.println("call 2: " + (ob.a + ob.b));
      ob.calc(ob);
```

```
      System.out.println("call 3: " + ob.a + " " + ob.b);
      System.out.println("call 4: " + (ob.a + ob.b));
      System.out.println("call 5: " +  ob.a + ob.b);
   }
}
```

```
class A{
   static int a;
}
class B{
   static int b;
}

public class TEST {
   public static void main(String args[])
   {
       A.a=1;
       B.b=2;
       A ob= new A();
       B ob2=new B();
       ob.a=10;
       ob2.b=5;
       System.out.println(" A.a "+A.a);
       System.out.println(" B.b "+B.b);
      System.out.println(" ob.a "+ob.a);
      System.out.println(" ob2.b "+ob2.b);
       ob.a=14;
       ob2.b=23;
       System.out.println(" A.a "+A.a+ob.a);
       System.out.println(" B.b "+B.b+ob2.b);
   }
}
```

```
class StringDemo3 {
  public static void main(String args[]) {
    String str[] = { "one", "two", "three" };

    for(int i=0; i<str.length; i++)
          System.out.println("str[" + i + "]: " + str[i]);
   System.out.println(str[0]+ str[1]);
  System.out.println((str[0]+ str[2]).length());
   System.out.println(str[0].length()+ str[1]);
  }
}
```

Part-2

```
class ExamException{
  public static void main(String args[]){
    try{
       int a[]=new int[7];
       System.out.println("Exception Test");
       a[4]=30/0;
       System.out.println("First print statement in try block");
     }
    catch(ArithmeticException e){
      System.out.println("Warning: ArithmeticException");
       try{
          int a[]=new int[7];
          a[9]=5;
          System.out.println(" Is it OK ?");
       }
       catch(ArrayIndexOutOfBoundsException e2){
           System.out.println("Warning: inside ");
        }
     }
    catch(ArrayIndexOutOfBoundsException e){
      System.out.println("Warning: ArrayIndexOutOfBoundsException");
     }
    catch(Exception e){
        System.out.println("Warning: Some Other exception");
     }
    finally{
        System.out.println("The Finally block");
      }
    System.out.println("Out of try-catch block...");

  }
}
```

```
class ExceptionTest{
  public static void main(String args[]){
    try{
       int a[]=new int[7];
       a[4]=30/0;
```

```
        System.out.println("First print statement in try block");
      }
    catch(ArithmeticException e){
      System.out.println("Warning: ArithmeticException");
       try{
         int a[]=new int[7];
         a[9]=5;
         System.out.println(" Is it OK ?");
       }
       catch(ArrayIndexOutOfBoundsException e2){
          System.out.println("Warning: inside ");
        }
      }
    catch(ArrayIndexOutOfBoundsException e){
      System.out.println("Warning: ArrayIndexOutOfBoundsException");
      }
    catch(Exception e){
        System.out.println("Warning: Some Other exception");
      }
    finally{
        System.out.println("The Finally block");
       }
    System.out.println("Out of try-catch block...");
  }
}
```