//Inheritance Example

```
/*
class show1{
	float salary=40000;

}
class employee extends show1{ //inheritance program
	int bonus=1000;

	public static void main(String[] args) {
		employee e= new employee();
		System.out.println(" Employee Salary is: "+e.salary);
		System.out.println("Bonus of Employee is: "+e.bonus);

	}
}
*/
```

```
//Java 2D Array

/*
package com.Teju;

public class show {

	public static void main(String[] args) {
int[][] mynum = {{11,22,33,44},{55,66,77}};
		for(int i=0; i<mynum.length; i++) {
			for(int j=0; j<mynum[i].length; j++) {
				System.out.println(mynum[i][j]);
				System.out.println("Length of 2d Array is : " + mynum.length);
				System.out.println("1st row : " + mynum[0].length);
				System.out.println("2nd row : " + mynum[1].length);

			}
		}

}
}

*/
```

//Java Abstraction

```
/*
```

```
public abstract class show1{
		abstract void calculate(int a, int b) ;
}
 class Addition extends show1{
	void calculate(int a, int b) {
		int x= a+b;
		System.out.println("Sum: "+x );

	}

}
class Myclass{
	public static void main(String[] args) {
		Addition a = new Addition();
		a.calculate(1,1);

	}
}

*/
```

//Java Arithmetic Operator

```
/*
package com.Teju;

public class show {
public static void main(String[] args) {
int num1=1;
		int num2=1;
		int result=num1+num2;
		System.out.println("Addition is "+result);

		int num3=7;
		int num4=9;
		int output=num3-num4;
		System.out.println("Substraction is "+output);

		int num5=2;
		int num7=1;
		int show=num5*num7;
		System.out.println("multiplication is "+show);


		int num8=11;
		int num9=2;
		int Div=num8/num9;
```

```
		System.out.println("Division "+Div);

		int num10=11;
		int num11=2;
		int mod=num10%num11;
		System.out.println("Modulus "+mod);
}
}

*/
```

//Java Arrays

```
/*
package com.Teju;

public class show {

	public static void main(String[] args) {
char[] letters = {'a','b','c','d'};
		for(char j : letters) {
			System.out.println(j);
		}

}
}

*/
```

//Java Bitwise Shift Operator

```
/*
package com.Teju;

public class show {

	public static void main(String[] args) {
int num1=12, num2=25, bitwiseOR,bitwiseAND;
		bitwiseOR= num1|num2;
		System.out.println(bitwiseOR);


		bitwiseAND= num1&num2;
		System.out.println(bitwiseAND);

int num3=2;
```

```
		int LeftShift= num3<<2;
		System.out.println(LeftShift);

		int num4=8;
		System.out.println(num4 >> 2);

}
}

*/
```

//Java Datatypes

```
/*
package com.Teju;

public class show {

	public static void main(String[] args) {
		byte a= -128;
		byte b= 127;

	   System.out.println(" Byte Size = 1 byte; Stores number from "+ a);
		System.out.println("to "+b);

		short c= -32768;
		short d= 32767;

		System.out.println("Short Size = 2 bytes; Stores number from "+ c);
		System.out.println("to "+d);

		int e= -2147483648;
		int f= 2147483647;

		System.out.println("Int Size = 4 bytes; Stores number from "+ e);
		System.out.println("to "+f);

		long g= -9223372;
		long h= 854775807;

		System.out.println("Long Size = 8 bytes; Stores number from "+ g);
		System.out.println("to "+h);

		float i= 6.0f;
		float j= 7.0f;
```

```
		System.out.println("float Size = 4bytes; Stores fractional  number from
digits"+ g);
		System.out.println("to "+h);

		double k= 15.0f;
		double l= 15.0f;

		System.out.println("double Size = 8bytes; Stores fractional  number from
digits"+ k);
		System.out.println("to "+l);

		boolean m=(10>9)?true:false;
		System.out.println("10>9 is "+m);

		char n='m';
		System.out.println("The character is: "+n);
		}
}

*/
```

//Java Encapsulation

```
/*
class show1{
	private int age;


	public int getAge() {
		return age;

}
	public void setAge(int age) {
		this.age=age;
	}

}
class Main{
	public static void main(String[] args) {
		show1 s=new show1();
		s.setAge(23);
		System.out.println("Age is: "+s.getAge());

	}
}
```

```
*/
```

//Java Equality and relational Operators

```
/*
package com.Teju;

public class show {

	public static void main(String[] args) {
System.out.println(!(5 == 3));
		System.out.println(!(5>3));

}
}

*/
```

```
//Java For Each Loop

/*
package com.Teju;

public class show {

	public static void main(String[] args) {
for(int i:numbers) {
			System.out.println(i);
		}
}
}

*/
```

//Java For Loop

```
/*
package com.Teju;

public class show {

	public static void main(String[] args) {
for(int i =0; i<10; i++) {
			if(i>=2 && i<=4) {
				continue;
			}
```

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

*/
```

//Java For loop1

```
/*
package com.Teju;

public class show {

        public static void main(String[] args) {
for(int i=0; i<10; i++) {
                        if(i==4) {
                                break;
                        }
                        System.out.println(i);
                }
}
}

*/
```

//Java HierarchicalInheritance

```
/*
lass show1{
    int parentVar=5;

}
class C1 extends show1{
    int childVar=1;
}
class C2 extends show1{
    int childVar=2;
}
class C3 extends show1{
    int childVar=3;
}
class Main{
    public static void main(String[] args){
        C1 child1=new C1();
        C2 child2=new C2();
```

```
        C3 child3=new C3();

        System.out.println("Parentvariable + C1 :"+(child1.parentVar+child1.childVar));

        System.out.println("Parentvariable + C2 :"+(child1.parentVar+child2.childVar));

        System.out.println("Parentvariable + C3 :"+(child1.parentVar+child3.childVar));

    }
}

*/
```

//Java If Statement

```
/*
package com.Teju;

public class show {

        public static void main(String[] args) {
String str = "eclipseWorkspace";
                if(str == "eclipseWorkspace") {
                        System.out.println("Hello eclipse");
                }
                System.out.println("This statement is always executed");

}
}

*/
```

//Java Inheritance

```
/*
class show1{
        float salary=40000;

}
class employee extends show1{ //inheritance program
        int bonus=1000;

        public static void main(String[] args) {
                employee e= new employee();
                System.out.println(" Employee Salary is: "+e.salary);
                System.out.println("Bonus of Employee is: "+e.bonus);
```

```
	}
}

*/
```

//Java Logical Operator

```
/*
package com.Teju;

public class show {

	public static void main(String[] args) {

System.out.println((5>3) && (8>5));
		System.out.println((5>3) && (8<5));

		System.out.println((5>3) || (8>5));
		System.out.println((5>3) || (8<5));
		System.out.println((5<3) || (8<5));

}
}


*/
```

//Java MethodOverloading

```
/*
class show1 {


    private static void display(int a){
        System.out.println("Got Integer data.");
    }


    private static void display(String a){
        System.out.println("Got String object.");
    }
```

```
    public static void main(String[] args) {
        display(1);
        display("Hello");
    }
}

*/
```

//Java Method Overriding

```
/*
lass show1{
        public void display() {
                System.out.println("Parent method is executed");
        }
}
class child extends show1{
        public void display() {
                System.out.println("Child method is executed");
        }
}
public class methodOverriding{
        public static void main(String[] args) {
                show1 s = new show1();
                s.display();

                show1 c= new child();
                c.display();
        }
}

*/
```

//Java Multilevel Inheritance

```
/*
class show1{
        public void display() {
                System.out.println("Inside Display");

        }
}
```

```
class Rectangle extends show1{
	public void area() {
		System.out.println("Inside area");

	}
}

class Cube extends Rectangle{
	public void volume() {
		System.out.println("Inside Volume");
	}
}
class Tester{
	public static void main(String[] args) {
		Cube cube = new Cube();
		cube.display();
		cube.area();
		cube.volume();

	}
}

*/
```

//Java Object Creation

```
/*
package com.Teju;

public class Display {
	String hairs="Golden";
	final int eyes=2; //modifier
	String face= "Oval";
	String looks;


	public static void main(String[] arg) {
		Display obj1 = new Display();
		obj1.looks="Parents"; //modify the attribute
		System.out.println("Hair colour is: "+obj1.hairs);
		System.out.println("Number of eyes is: "+obj1.eyes);
		System.out.println("Face shape is: "+obj1.face);
		System.out.println("Get look from : "+obj1.looks);

		Display obj2 = new Display();
```

```
                obj2.face="Round"; //Overriding the attribute
                System.out.println("Face shape is: "+obj2.face);
                //obj2.eyes= 4;
                //System.out.println("Number of eyes is: "+obj2.eyes);


        }
}


*/
```

//Hierarchical Inheritance

```
/*
class show1{
   int parentVar=5;

}
class C1 extends show1{
   int childVar=1;
}
class C2 extends show1{
   int childVar=2;
}
class C3 extends show1{
   int childVar=3;
}
class Main{
   public static void main(String[] args){
      C1 child1=new C1();
      C2 child2=new C2();
      C3 child3=new C3();

      System.out.println("Parentvariable + C1 :"+(child1.parentVar+child1.childVar));

      System.out.println("Parentvariable + C2 :"+(child1.parentVar+child2.childVar));

      System.out.println("Parentvariable + C3 :"+(child1.parentVar+child3.childVar));

   }
}

*/
```

//Single Inheritance

```
/*
class show1 {



	static int length=2;
	static int breadth=5;


}


class Rectangle extends show1 {

    public static void main(String[] args) {
      int area = length*breadth;
      System.out.println("Area of Rectangle using single Inheritance is: "+area);



    }

}

*/
```

//Java Program to find length of an array and print specific index element of an array

```
/*
package com.Teju;

public class show {

	public static void main(String[] args) {
int[] numbers= {1,2,3,4,5};
		System.out.println(numbers[0]);
		numbers[0]=10;
		System.out.println("numbers[0]");
		System.out.println("Lenght is: "+numbers.length);
for(int i=0; i<numbers.length; i++) {
			System.out.println(numbers[i]);
		}
```

```
}
}
}

*/
```

//Java program to find out largest number using IF-

```
/*
package com.Teju;

public class show {

	public static void main(String[] args) {
int a=10, b=50, c=13;
		if(a > b && a>c)
		{
			System.out.println("Largest number is : "+a);
		}
		else if(b>c)
		{
			System.out.println("Largest number is : "+b);

		}
		else
		{
			System.out.println("Largest number is : "+c);

		}
	}
}

*/
```

//Java program to find out largest number using IF-Else

```
/*
package com.Teju;

public class show {

	public static void main(String[] args) {
int a=10, b=50, c=13;
		if(a > b && a>c)
```

```
		{
			System.out.println("Largest number is : "+a);
		}
		else if(b>c)
		{
			System.out.println("Largest number is : "+b);

		}
		else
		{
			System.out.println("Largest number is : "+c);

		}
	}
}

*/
```

//Java Program to pass parameters to Methods

```
/*
package com.Teju;

public class Display {
static void multiply(int a, int b, int c) {
		int multiplication =a*b*c;
		System.out.println("multipliction is: "+ multiplication);

	}

	public void Divide(int a, int b) {
		int Division = a/b;
		System.out.println("Division is :"+Division);

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



		multiply(1,2,1);


		Div.Divide(7,2);
```

```
	}
}

*/
```

//Java Program to print the week days three times

```
/*
package com.Teju;

public class show {

	public static void main(String[] args) {
for(int i =1; i<=3; i++) {
				System.out.println("Week: "+i);

				String[] Days=
{"Sunday","Monday","Tuesday","Wednesday","Thursday","Friday","Saturday"};
				for(String D:Days) {
					System.out.println("Days: "+D);
				}
			}
}
}
*/
```

//Java Single Inheritance

```
/*
class show1 {



	static int length=2;
	static int breadth=5;


}


class Rectangle extends show1 {

    public static void main(String[] args) {
      int area = length*breadth;
```

```
        System.out.println("Area of Rectangle using single Inheritance is: "+area);


    }

}

*/
```

//Java Super Keyword

```
/*
class show1{
        int id;
        String name;
        show1(int id, String name){
                this.id=id;
                this.name=name;

        }
}
class Emp extends show1{
        float salary;
        Emp(int id,String name, float salary){
                super(id,name); //reusing parent constructor
                this.salary=salary;

        }
        void display() {
                System.out.println(id+ " "+name+" "+salary);
        }

}
class Superclass{
        public static void main(String[] args) {
                Emp e1= new Emp(1,"Kiyaan", 45000f);
                e1.display();

        }
}

*/
```

//Java ternery Operator

```
/*
package com.Teju;

public class show {

	public static void main(String[] args) {
int marks=70;
		String result=(marks>40) ? "Pass" : "Fail";

		System.out.println("You " + result + " the exam");

}
}

*/
```

//Java Unary Operator

```
/*
package com.Teju;

public class show {

	public static void main(String[] args) {
int num12=100;
		num12++;
		System.out.println("Increment "+num12);

		int num13= 100;
		num13--;
		System.out.println("Decrement "+num13);

}
}

*/
```

//Java User Defined Methods

```
/*
```

```
package com.Teju;

public class Display {

static void welcome() {
		System.out.println("Hey What's up !");
	}
	static void add() {
		int a=2;
		int b=5;
		int sum= a+b;
		System.out.println("SUM is: "+sum);

		}
	public void sub() {
		int a=7;
		int b=7;
		int sub= a-b;
		System.out.println("SUB is: "+sub);
	}
public static void main(String[] args) {
		welcome();
		add();

		Display substract = new Display();
		substract.sub();







	}
}


*/
```

//Java WHile Loop

```
/*
package com.Teju;

public class show {

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

```
int i =5;
                while(i>=0) {
                        System.out.println(i);
                        i--;
                }
                int result;
        for(int i=0; i<5; i++)
        {
                result=i*i+1;
                System.out.println(result);
        }

}
}


*/
```

//Multilevel Inheritance

```
/*
class show1{
        public void display() {
                System.out.println("Inside Display");

        }
}

class Rectangle extends show1{
        public void area() {
                System.out.println("Inside area");

        }
}

class Cube extends Rectangle{
        public void volume() {
                System.out.println("Inside Volume");
        }
}
class Tester{
        public static void main(String[] args) {
                Cube cube = new Cube();
                cube.display();
                cube.area();
                cube.volume();
```

```
        }
}

*/
```