2. Write a program that illustrates Interface Inheritance extended by P1 & P2. Interface P12 inherits from both P1 & P2. Each interface declares one constant and one method. Class Q implements P12. Instantiate Q & invoke each of its methods. Each method displays one of the constants.

```
interface P{
	int pvar = 0;
	public void methodP();
}

interface P1 extends P{
	int p1var = 1;
	public void methodP1();
}

interface P2 extends P{
	int p2var = 2;
	public void methodP2();
}

interface P12 extends P1, P2{
	int p12var = 12;
	public void methodP12();
}

class Q implements P12{
	public void methodP(){
		System.out.println("This is P: " + pvar);
	}
	public void methodP1(){
		System.out.println("This is P1: " + p1var);
	}
	public void methodP2(){
		System.out.println("This is P2: " + p2var);
	}
	public void methodP12(){
		System.out.println("This is P12: " + p12var);
	}
}
```

```
class InterfaceImplementation{
	public static void main(String args[]){
		Q obj = new Q();
		obj.methodP();
		obj.methodP1();
		obj.methodP2();
		obj.methodP12();
	}
}
```

Output:

```
D:\Learn\Sem-5\Java\Assignments\Assignment-3\InterfaceImplementation>javac InterfaceImplementation.java

D:\Learn\Sem-5\Java\Assignments\Assignment-3\InterfaceImplementation>java InterfaceImplementation
This is P: 0
This is P1: 1
This is P2: 2
This is P12: 12
```