

Program : Write a program for subtraction of two matrix.

Source code :

```
public class employe{

    public static void main(String[] args) {

        int rows, cols;

        int a[][] = { {4, 5, 6}, {3, 4, 1}, {1, 2, 3}  };

        int b[][] = { {2, 0, 3}, {2, 3, 1},{1, 1, 1}  };

        rows = a.length;

        cols = a[0].length;

        int diff[][] = new int[rows][cols];

        for(int i = 0; i < rows; i++){

            for(int j = 0; j < cols; j++){

                diff[i][j] = a[i][j] - b[i][j];

            }

        }

        System.out.println("Subtraction of two matrices: ");

        for(int i = 0; i < rows; i++){

            for(int j = 0; j < cols; j++){

                System.out.print(diff[i][j] + " ");

            }

            System.out.println();

        }

    }

}
```

Output :

```
Subtraction of two matrices:
2 5 3
1 1 0
0 1 2
```

Program : write a program of abstract class.

```
abstract class employe {  
    abstract void draw();  
}  
  
class Rectangle extends employe{  
    void draw(){System.out.println("drawing rectangle");}  
}  
  
class Circle1 extends employe{  
    void draw(){System.out.println("drawing circle");}  
}  
  
class TestAbstraction1{  
    public static void main(String args[]){  
        employe s=new Circle1();//In a real scenario, object is provided through method, e.g., getShape() method  
        s.draw();  
    }  
}
```

Output :

```
drawing circle
```

Program : Write a java program for creating multiple catch blocks.

```
public class employe {  
    public static void main(String[] args) {  
        try{  
            int a[]=new int[5];  
            a[5]=30/0;  
            System.out.println(a[10]);  
        }  
        catch(ArithmeticException e)  
        {  
            System.out.println("Arithmetic Exception occurs");  
        }  
        catch(ArrayIndexOutOfBoundsException e)  
        {  
            System.out.println("ArrayIndexOutOfBoundsException occurs");  
        }  
        catch(Exception e)  
        {  
            System.out.println("Parent Exception occurs");  
        }  
        System.out.println("rest of the code");  
    }  
}
```

Output :

```
Arithmetic Exception occurs  
rest of the code
```

Program : Write a java program create Threads by Extending Thread Class.

```
public class employe extends Thread {  
  
    // initiated run method for Thread  
  
    public void run()  
  
    {  
  
        System.out.println("Thread Started Running...");  
  
    }  
  
    public static void main(String[] args)  
  
    {  
  
        employe g1 = new employe();  
  
        // invoking Thread  
  
        g1.run();  
  
    }  
}
```

Output :

```
Thread Started Running...
```