

4. Read a matrix from the console and check whether it is symmetric or not.

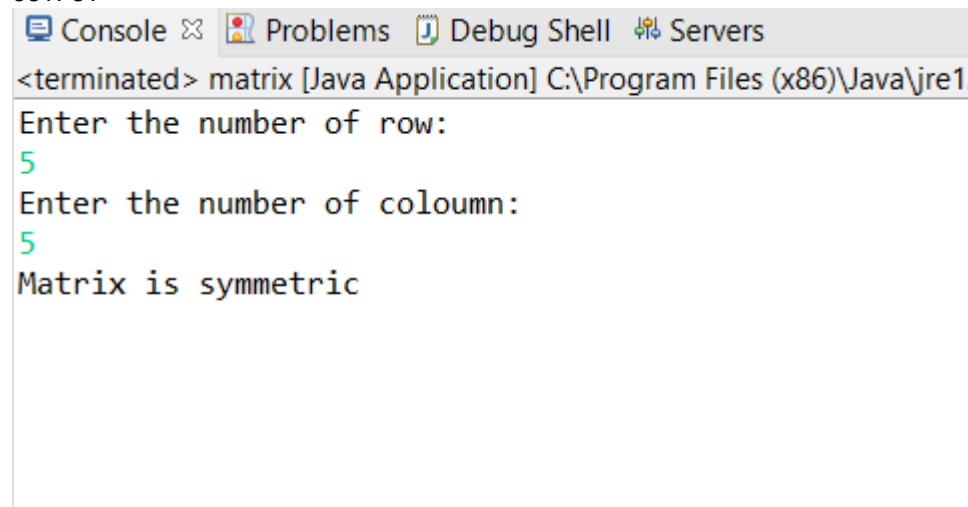
```
package org.springframework;
import java.util.*;
public class matrix {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner ip=new Scanner(System.in);
        System.out.println("Enter the number of row: ");
        int row=ip.nextInt();
        System.out.println("Enter the number of coloumn: ");
        int col=ip.nextInt();
        if(row==col)
        {
            System.out.println("Matrix is symmetric ");
        }
        else
            System.out.println("Matrix is not symmetric ");

    }

}
```

OUTPUT

A screenshot of an IDE's console window. The window has tabs for 'Console', 'Problems', 'Debug Shell', and 'Servers'. The 'Console' tab is active, showing the output of a Java application. The text in the console is: '<terminated> matrix [Java Application] C:\Program Files (x86)\Java\jre1. Enter the number of row: 5 Enter the number of coloumn: 5 Matrix is symmetric'. The input '5' is shown in green, indicating it was entered by the user. The output 'Matrix is symmetric' is shown in black.

5. Create CPU with attribute price. Create inner class Processor (no. of cores, manufacturer) and static nested class RAM (memory, manufacturer). Create an object of CPU and print information of Processor and RAM.

```
public class Cpu {
    int price;

    Cpu(int p) {
        this.price = p;
    }

    class Processor {
        int cores;
        String manufacture;
    }
}
```

```

    Processor(int n, String m) {
        this.cores = n;
        this.manufacture = m;
    }

    void display() {
        System.out.println("No of Cores : " + this.cores);
        System.out.println("Processor manufactures : " + this.manufacture);
    }
}

static class Ram {
    int memory;
    String manufacture;

    Ram(int n, String m) {
        this.memory = n;
        this.manufacture = m;
    }

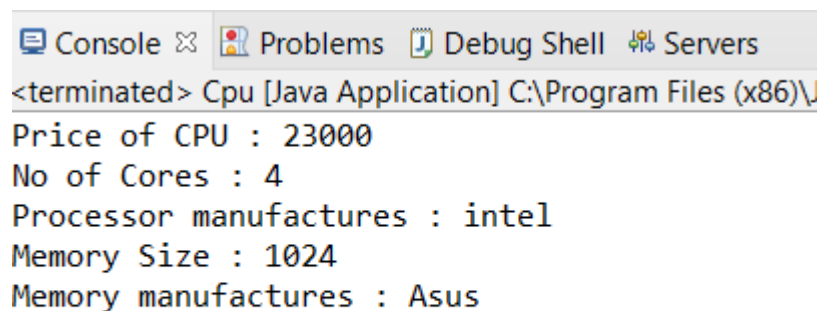
    void display() {
        System.out.println("Memory Size : " + this.memory);
        System.out.println("Memory manufactures : " + this.manufacture);
    }
}

void display() {
    System.out.println("Price of CPU : " + this.price);
}

public static void main(String[] args) {
    Cpu intel = new Cpu(23000);
    Cpu.Processor i_processor = intel.new Processor(4, "intel");
    Cpu.Ram i_ram = new Ram(1024, "Asus");
    intel.display();
    i_processor.display();
    i_ram.display();
}
}

```

OUTPUT



```

<terminated> Cpu [Java Application] C:\Program Files (x86)\J
Price of CPU : 23000
No of Cores : 4
Processor manufactures : intel
Memory Size : 1024
Memory manufactures : Asus

```