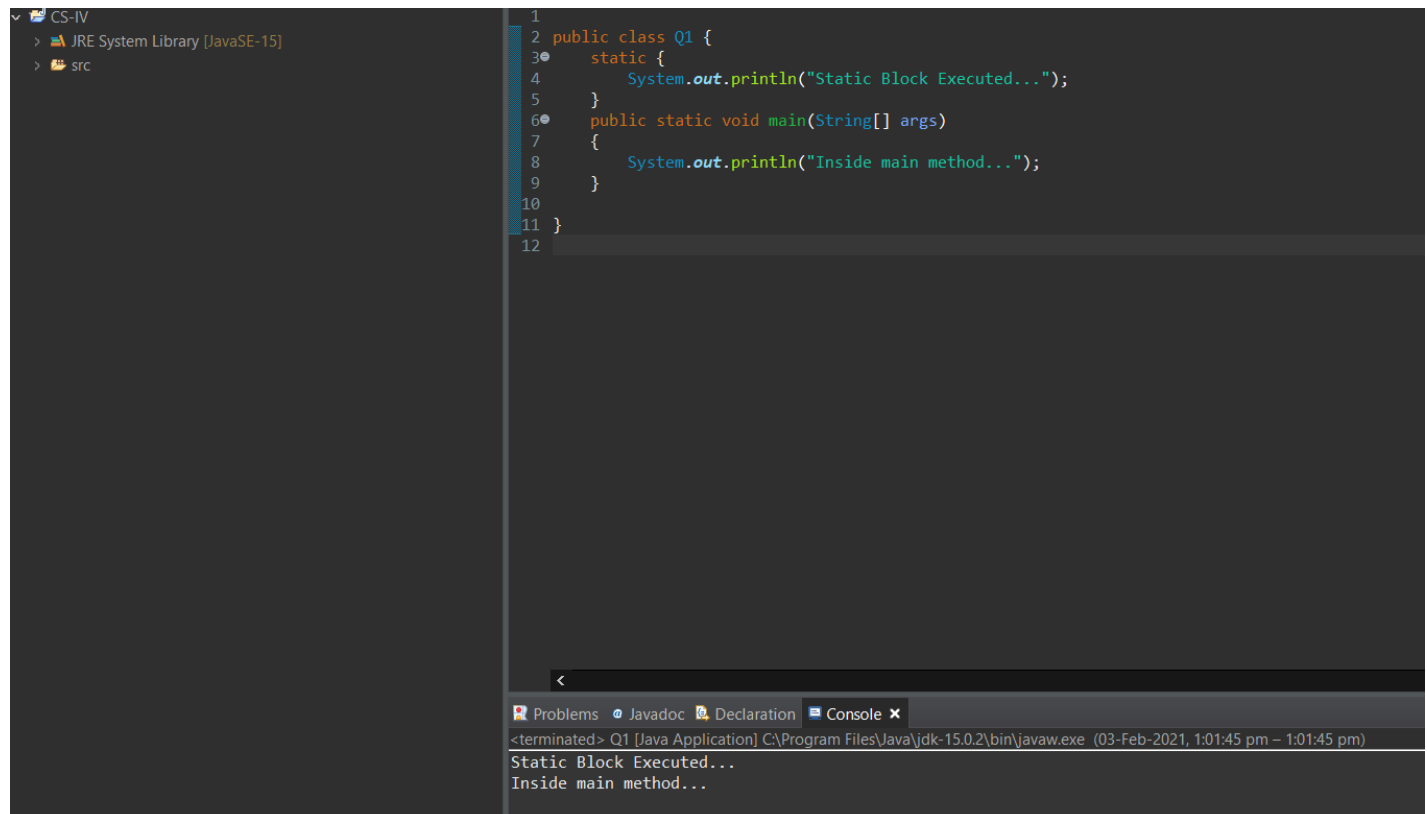


SOURCE CODE

1. JAVA PROGRAM TO DISPLAY ANY MESSAGE WITHOUT REFERRING TO THE MAIN METHOD

```
public class Q1 {  
    static {  
        System.out.println("Static Block Executed...");  
    }  
    public static void main(String[] args)  
    {  
        System.out.println("Inside main method...");  
    }  
}
```



The screenshot displays an IDE interface. On the left, a project explorer shows a folder named 'src' containing a file 'Q1.java'. The main editor window shows the source code of the 'Q1' class, which includes a static block and a main method. The static block prints 'Static Block Executed...' and the main method prints 'Inside main method...'. Below the editor, a console window shows the output of the program: '<terminated> Q1 [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (03-Feb-2021, 1:01:45 pm - 1:01:45 pm)' followed by the two printed messages on separate lines.

```
1  
2 public class Q1 {  
3     static {  
4         System.out.println("Static Block Executed...");  
5     }  
6     public static void main(String[] args)  
7     {  
8         System.out.println("Inside main method...");  
9     }  
10 }  
11  
12
```

<terminated> Q1 [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (03-Feb-2021, 1:01:45 pm - 1:01:45 pm)
Static Block Executed...
Inside main method...

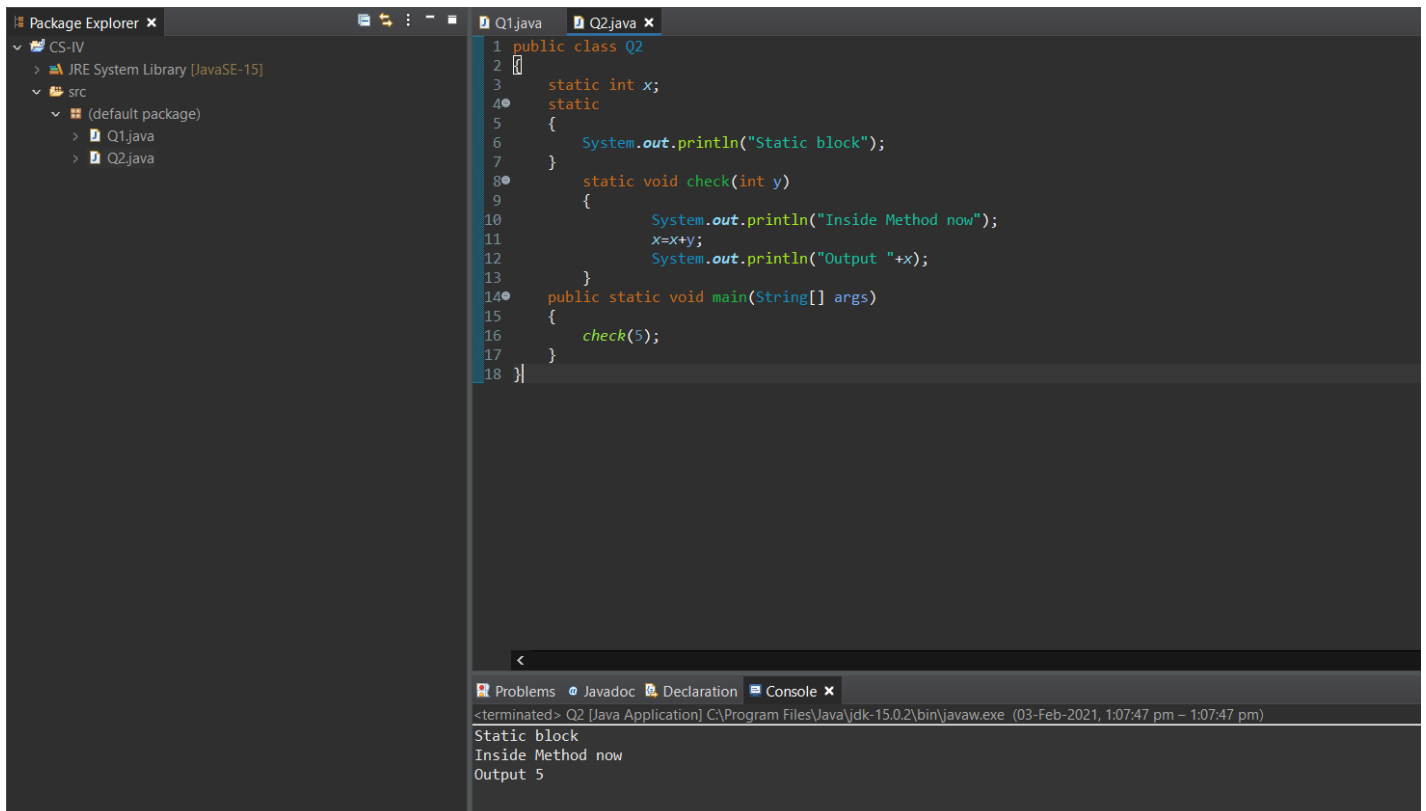
SOURCE CODE

2. JAVA PROGRAM TO DEMONSTRATE STATIC VARIABLES, METHODS & BLOCKS

```
public class Q2
{
    static int x;
    static
    {
        System.out.println("Static block");
    }

    static void check(int y)
    {
        System.out.println("Inside Method now");
        x=x+y;
        System.out.println("Output "+x);
    }

    public static void main(String[] args)
    {
        check(5);
    }
}
```



The screenshot shows an IDE with a Package Explorer on the left and a code editor on the right. The Package Explorer shows a project named 'CS-IV' with a 'src' folder containing 'Q1.java' and 'Q2.java'. The code editor displays the source code of 'Q2.java', which is identical to the code provided above. The console at the bottom shows the output of the program: 'Static block', 'Inside Method now', and 'Output 5'.

```
1 public class Q2
2 {
3     static int x;
4     static
5     {
6         System.out.println("Static block");
7     }
8     static void check(int y)
9     {
10         System.out.println("Inside Method now");
11         x=x+y;
12         System.out.println("Output "+x);
13     }
14     public static void main(String[] args)
15     {
16         check(5);
17     }
18 }
```

<terminated> Q2 [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (03-Feb-2021, 1:07:47 pm - 1:07:47 pm)
Static block
Inside Method now
Output 5

SOURCE CODE

3. JAVA PROGRAM TO CALCULATE NET AMOUNT TO BE PAID BY THE CUSTOMER FROM THE TABLE GIVEN BELOW:

Purchase Amount	Discount	
	Mill Cloth	Handloom Items
1-100	---	5%
101-200	5%	7.50%
210-300	7.50%	10%
Above 300	10%	15%

```
import java.util.Scanner;

public class Q3
{
    public static void main(String[] args)
    {
        Scanner s=new Scanner(System.in);

        System.out.println("Enter M for Mill cloth or H for Handloom items");
        char n=s.next().charAt(0);
        double discount=0.0,net_amount=0.0;
        switch(n)
        {
            case 'M':
                {
                    System.out.println("Enter the amount of Mill cloth purchased");
                    int m1=s.nextInt();
                    if(m1>=1 && m1<=100)
                        {
                            net_amount=m1-discount;
                        }
                    else if(m1>=101 && m1<=200)
                        {
                            discount=(0.05)*m1;
```

```

        net_amount=m1-discount;
    }
else if(m1>=210 && m1<=300)
    {
        discount=(0.0075)*m1;
        net_amount=m1-discount;
    }
else
    {
        discount=(0.15)*m1;
        net_amount=m1-discount;
    }
break;
    }
case 'H':
    {
        System.out.println("Enter the amount of Handloom cloth purchased");
        int h1=s.nextInt();
        if(h1>1 && h1<=100)
            {
                discount=(0.05)*h1;
                net_amount=h1-discount;
            }
        else if(h1>=101 && h1<=200)
            {
                discount=(0.0075)*h1;
                net_amount=h1-discount;
            }
        else if(h1>=210 && h1<=300)
            {
                discount=(0.1)*h1;

```

```

        net_amount=h1-discount;
    }
else
{
    discount=(0.15)*h1;
    net_amount=h1-discount;
}
break;
}
}

System.out.println("Net Amount to be paid is "+net_amount);
}
}

```

The screenshot shows an IDE with three tabs: Q1.java, Q2.java, and Q3.java. The Q3.java tab is active, displaying the following code:

```

1 import java.util.Scanner;
2 public class Q3
3 {
4     public static void main(String[] args)
5     {
6         Scanner s=new Scanner(System.in);
7         System.out.println("Enter M for Mill cloth or H for Handloom items");
8         char n=s.next().charAt(0);
9         double discount=0.0,net_amount=0.0;
10        switch(n)
11        {
12            case 'M':
13            {
14                System.out.println("Enter the amount of Mill cloth purchased");
15                int m1=s.nextInt();
16                if(m1>=1 && m1<=100)
17                {
18                    net_amount=m1-discount;
19                }
20                else if(m1>=101 && m1<=200)
21                {
22                    discount=(0.05)*m1;
23                    net_amount=m1-discount;
24                }
25                else if(m1>=210 && m1<=300)
26                {
27                    discount=(0.0075)*m1;
28                    net_amount=m1-discount;
29                }
30                else
31                {
32                    discount=(0.15)*m1;

```

The console output shows the execution of the program:

```

<terminated> Q3 [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (03-Feb-2021, 1:16:55 pm - 1:17:22 pm)
Enter M for Mill cloth or H for Handloom items
M
Enter the amount of Mill cloth purchased
120
Net Amount to be paid is =114.0

```