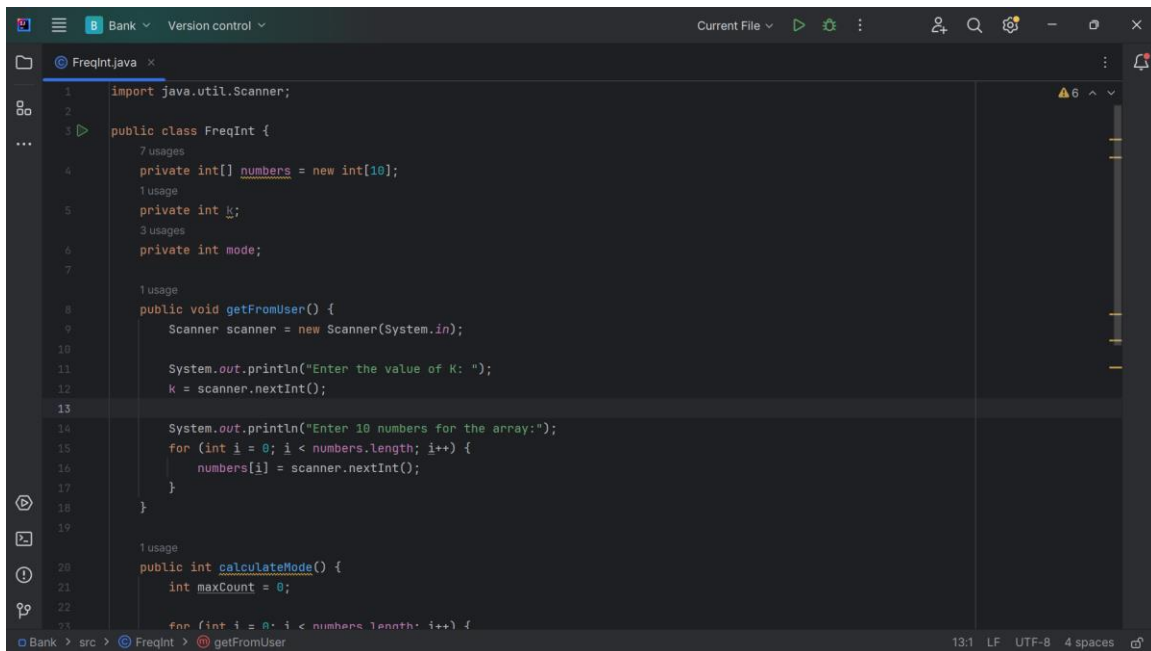
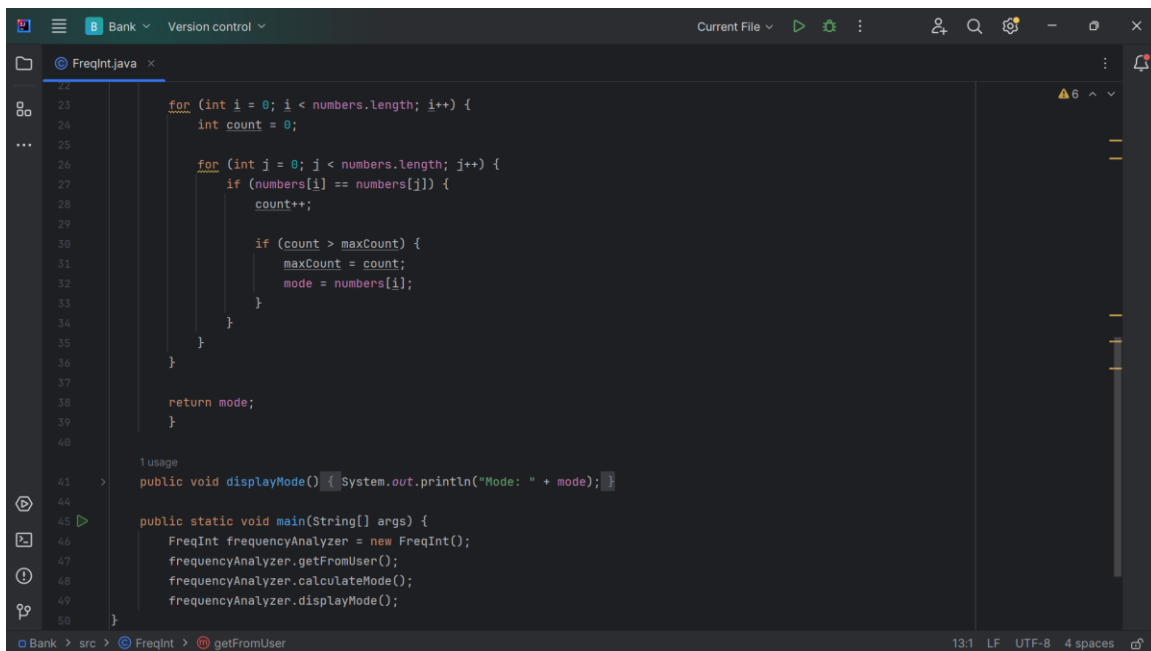


## 1<sup>st</sup> PROGRAM:

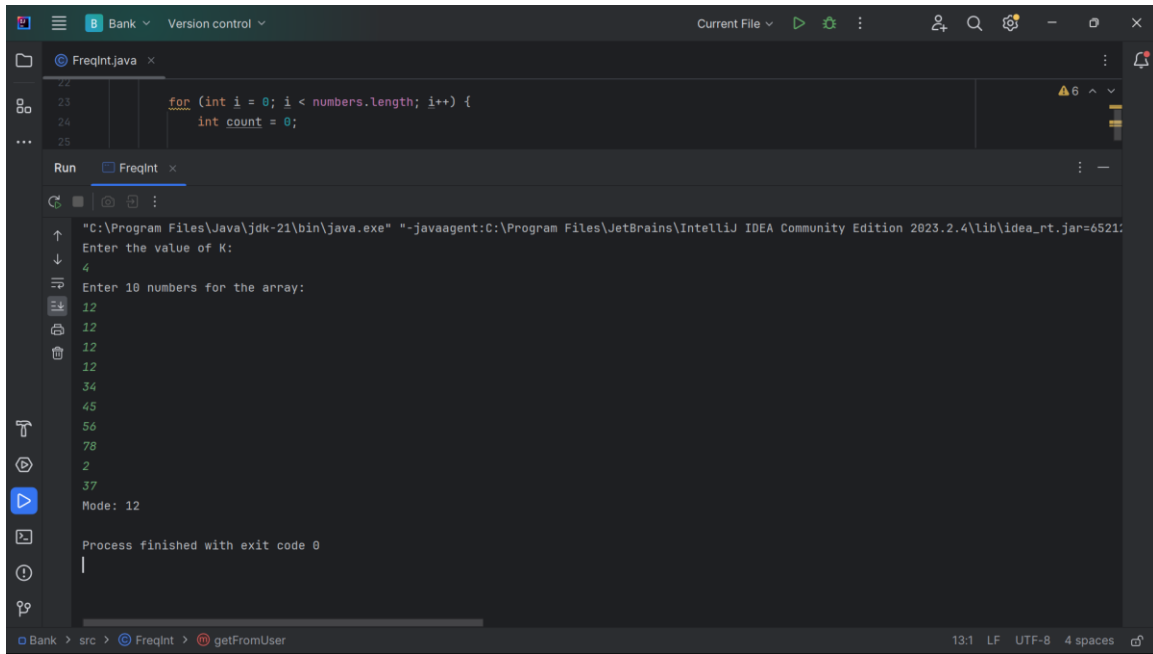


```
1 import java.util.Scanner;
2
3 public class FreqInt {
4     private int[] numbers = new int[10];
5     private int i;
6     private int mode;
7
8     public void getFromUser() {
9         Scanner scanner = new Scanner(System.in);
10
11         System.out.println("Enter the value of K: ");
12         k = scanner.nextInt();
13
14         System.out.println("Enter 10 numbers for the array:");
15         for (int i = 0; i < numbers.length; i++) {
16             numbers[i] = scanner.nextInt();
17         }
18     }
19
20     public int calculateMode() {
21         int maxCount = 0;
22         for (int i = 0; i < numbers.length; i++) {
```



```
23         for (int i = 0; i < numbers.length; i++) {
24             int count = 0;
25
26             for (int j = 0; j < numbers.length; j++) {
27                 if (numbers[i] == numbers[j]) {
28                     count++;
29
30                     if (count > maxCount) {
31                         maxCount = count;
32                         mode = numbers[i];
33                     }
34                 }
35             }
36         }
37
38         return mode;
39     }
40
41     public void displayMode() { System.out.println("Mode: " + mode); }
42
43     public static void main(String[] args) {
44         FreqInt frequencyAnalyzer = new FreqInt();
45         frequencyAnalyzer.getFromUser();
46         frequencyAnalyzer.calculateMode();
47         frequencyAnalyzer.displayMode();
48     }
49 }
```

OUTPUT:



```
22  
23     for (int i = 0; i < numbers.length; i++) {  
24         int count = 0;  
25     }  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
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95  
96  
97  
98  
99  
100
```

Run Freqlnt

"C:\Program Files\Java\jdk-21\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2023.2.4\lib\idea\_rt.jar=65211:C:\Program Files\Java\jdk-21\bin" -Dfile.encoding=UTF-8

Enter the value of K:  
4

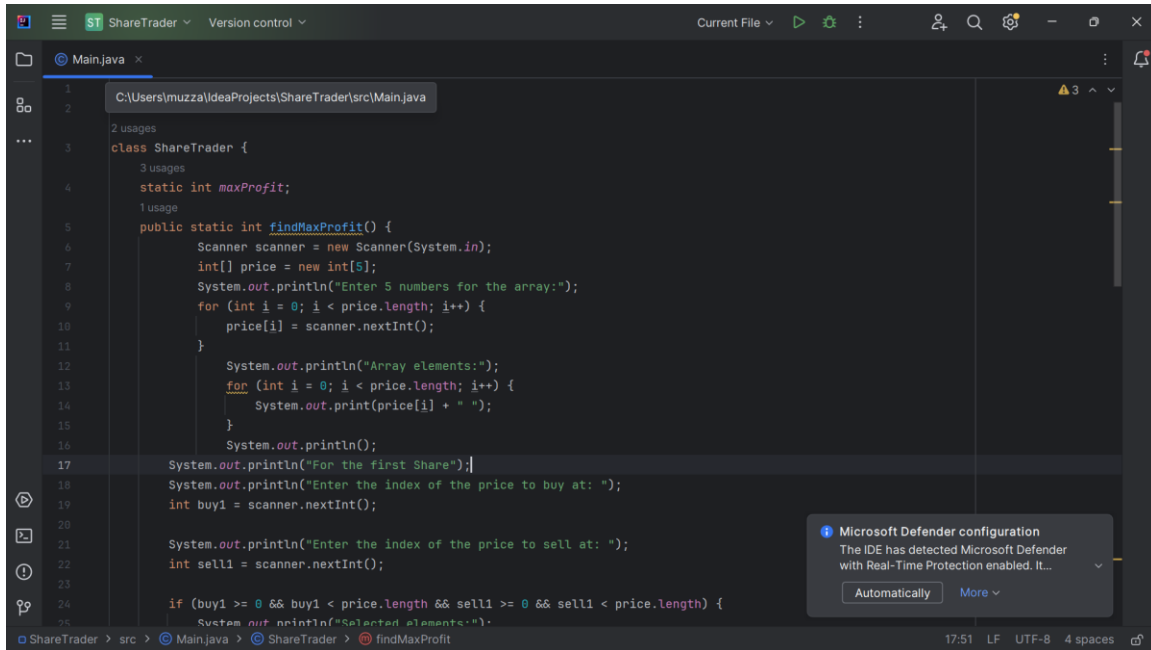
Enter 10 numbers for the array:  
12  
12  
12  
12  
34  
45  
56  
78  
2  
37

Mode: 12

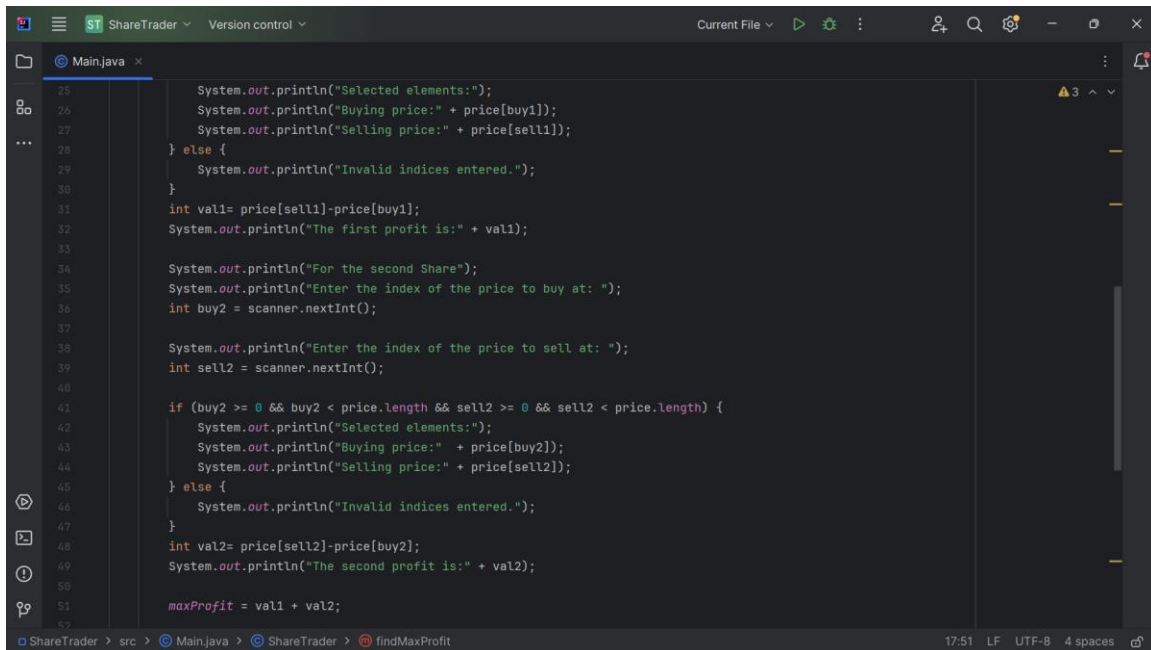
Process finished with exit code 0

Bank > src > Freqlnt > getFromUser 13:1 LF UTF-8 4 spaces

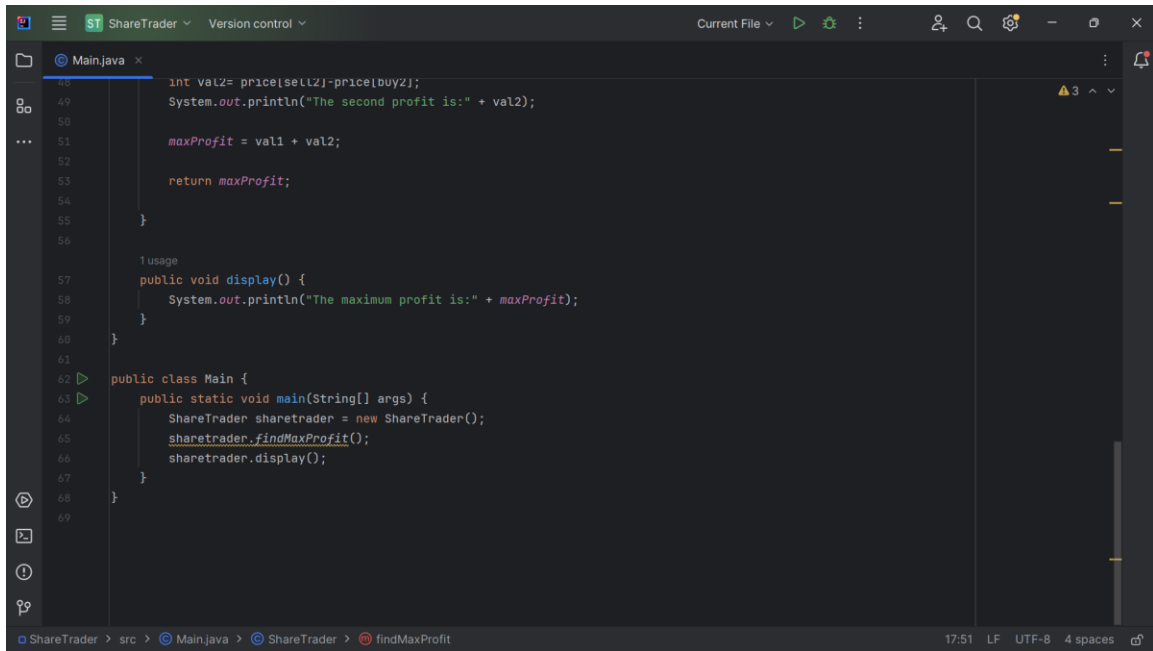
## 2<sup>ND</sup> PROGRAM:



```
1  C:\Users\muzza\IdeaProjects\ShareTrader\src\Main.java
2
3  class ShareTrader {
4      static int maxProfit;
5      public static int findMaxProfit() {
6          Scanner scanner = new Scanner(System.in);
7          int[] price = new int[5];
8          System.out.println("Enter 5 numbers for the array:");
9          for (int i = 0; i < price.length; i++) {
10             price[i] = scanner.nextInt();
11         }
12         System.out.println("Array elements:");
13         for (int i = 0; i < price.length; i++) {
14             System.out.print(price[i] + " ");
15         }
16         System.out.println();
17         System.out.println("For the first Share");
18         System.out.println("Enter the index of the price to buy at: ");
19         int buy1 = scanner.nextInt();
20
21         System.out.println("Enter the index of the price to sell at: ");
22         int sell1 = scanner.nextInt();
23
24         if (buy1 >= 0 && buy1 < price.length && sell1 >= 0 && sell1 < price.length) {
25             System.out.println("Selected elements:");
```

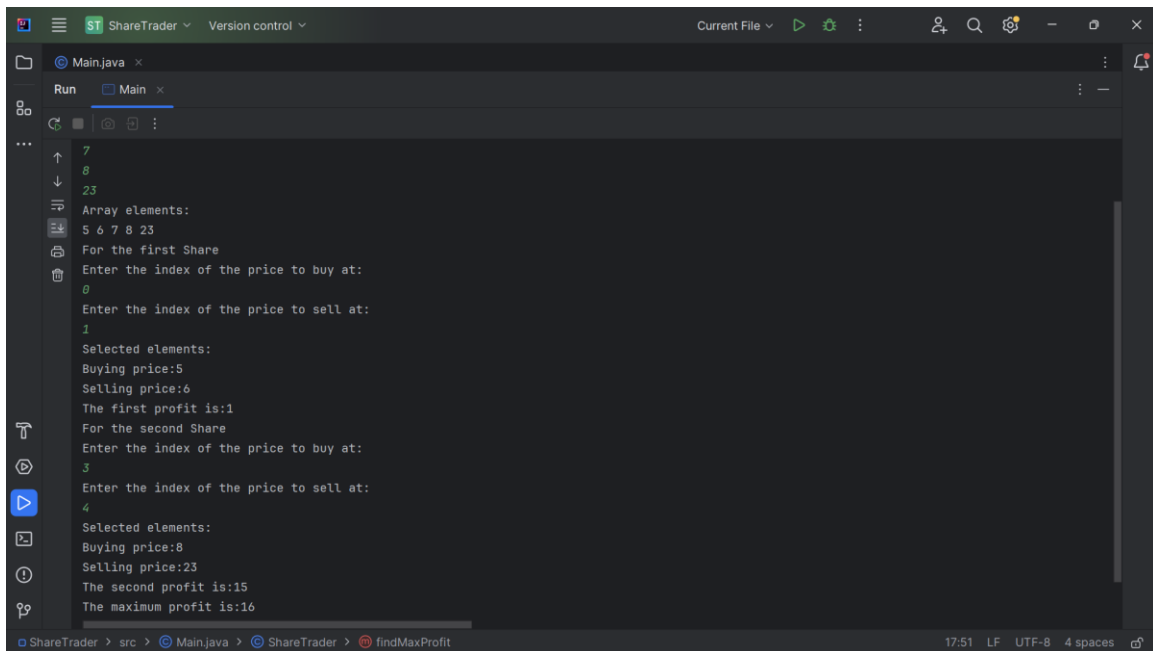


```
25         System.out.println("Selected elements:");
26         System.out.println("Buying price:" + price[buy1]);
27         System.out.println("Selling price:" + price[sell1]);
28     } else {
29         System.out.println("Invalid indices entered.");
30     }
31     int val1= price[sell1]-price[buy1];
32     System.out.println("The first profit is:" + val1);
33
34     System.out.println("For the second Share");
35     System.out.println("Enter the index of the price to buy at: ");
36     int buy2 = scanner.nextInt();
37
38     System.out.println("Enter the index of the price to sell at: ");
39     int sell2 = scanner.nextInt();
40
41     if (buy2 >= 0 && buy2 < price.length && sell2 >= 0 && sell2 < price.length) {
42         System.out.println("Selected elements:");
43         System.out.println("Buying price:" + price[buy2]);
44         System.out.println("Selling price:" + price[sell2]);
45     } else {
46         System.out.println("Invalid indices entered.");
47     }
48     int val2= price[sell2]-price[buy2];
49     System.out.println("The second profit is:" + val2);
50
51     maxProfit = val1 + val2;
52 }
```



```
48     int val2= price[sell2]-price[buy2];
49     System.out.println("The second profit is:" + val2);
50
51     maxProfit = val1 + val2;
52
53     return maxProfit;
54 }
55
56 //usage
57 public void display() {
58     System.out.println("The maximum profit is:" + maxProfit);
59 }
60 }
61
62 public class Main {
63     public static void main(String[] args) {
64         ShareTrader sharetrader = new ShareTrader();
65         sharetrader.findMaxProfit();
66         sharetrader.display();
67     }
68 }
69
```

OUTPUT:



```
7
8
9 23
10
11 Array elements:
12 5 6 7 8 23
13
14 For the first Share
15 Enter the index of the price to buy at:
16 0
17 Enter the index of the price to sell at:
18 1
19 Selected elements:
20 Buying price:5
21 Selling price:6
22 The first profit is:1
23 For the second Share
24 Enter the index of the price to buy at:
25 3
26 Enter the index of the price to sell at:
27 4
28 Selected elements:
29 Buying price:8
30 Selling price:23
31 The second profit is:15
32 The maximum profit is:16
```