

```
prac1 - Notepad
File Edit Format View Help
import java.util.Scanner;

public class prac1 {

    public static void main(String[] args) {
        int n;
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the number of elements:");
        n = sc.nextInt();
        int [] arr;
        arr = new int[n];
        System.out.println("Enter the elements of array:");
        for(int i=0;i<n;i++)
        {
            arr[i]=sc.nextInt();
        }

        int sum_even = 0;
        int sum_odd = 0;

        for(int i=0;i<n;i++)
        {
            if(i%2!=0)
                sum_even += arr[i];

            else
                sum_odd += arr[i];
        }

        System.out.println("Sum of even indices:"+sum_even);
        System.out.println("Sum of odd indices:"+sum_odd);
    }
}
```

Windows taskbar icons: File Explorer, Google Chrome, Microsoft Excel, Microsoft Word, and a terminal icon. System tray shows network, volume, and a red 'Q' icon. Date and time: 01:43 PM, 15-10-2020.

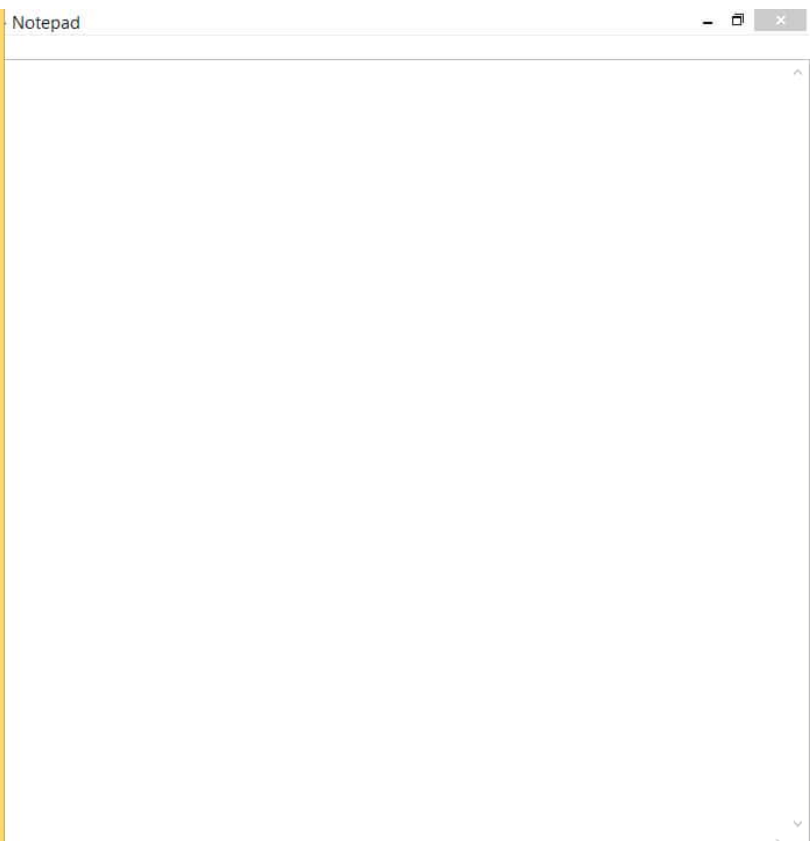
```
C:\Windows\system32\cmd.exe
Number of Pages:50
Year of Publication:2020
Author:rev
Publisher:aa
Price:50.0
-----
C:\Users\LENOVO\Desktop\java>clear

C:\Users\LENOVO\Desktop\java>javac praci.java
praci.java:3: error: class Praci is public, should be declared in a file named P
praci.java
public class Praci {
            ^
1 error

C:\Users\LENOVO\Desktop\java>javac praci.java

C:\Users\LENOVO\Desktop\java>java praci
Enter the number of elements:
10
Enter the elements of array:
1
2
3
4
5
6
7
8
9
1
Sum of even indices:21
Sum of odd indices:25

C:\Users\LENOVO\Desktop\java>_
```



prac2 - Notepad

```
File Edit Format View Help
import java.util.Scanner;

public class prac2 {

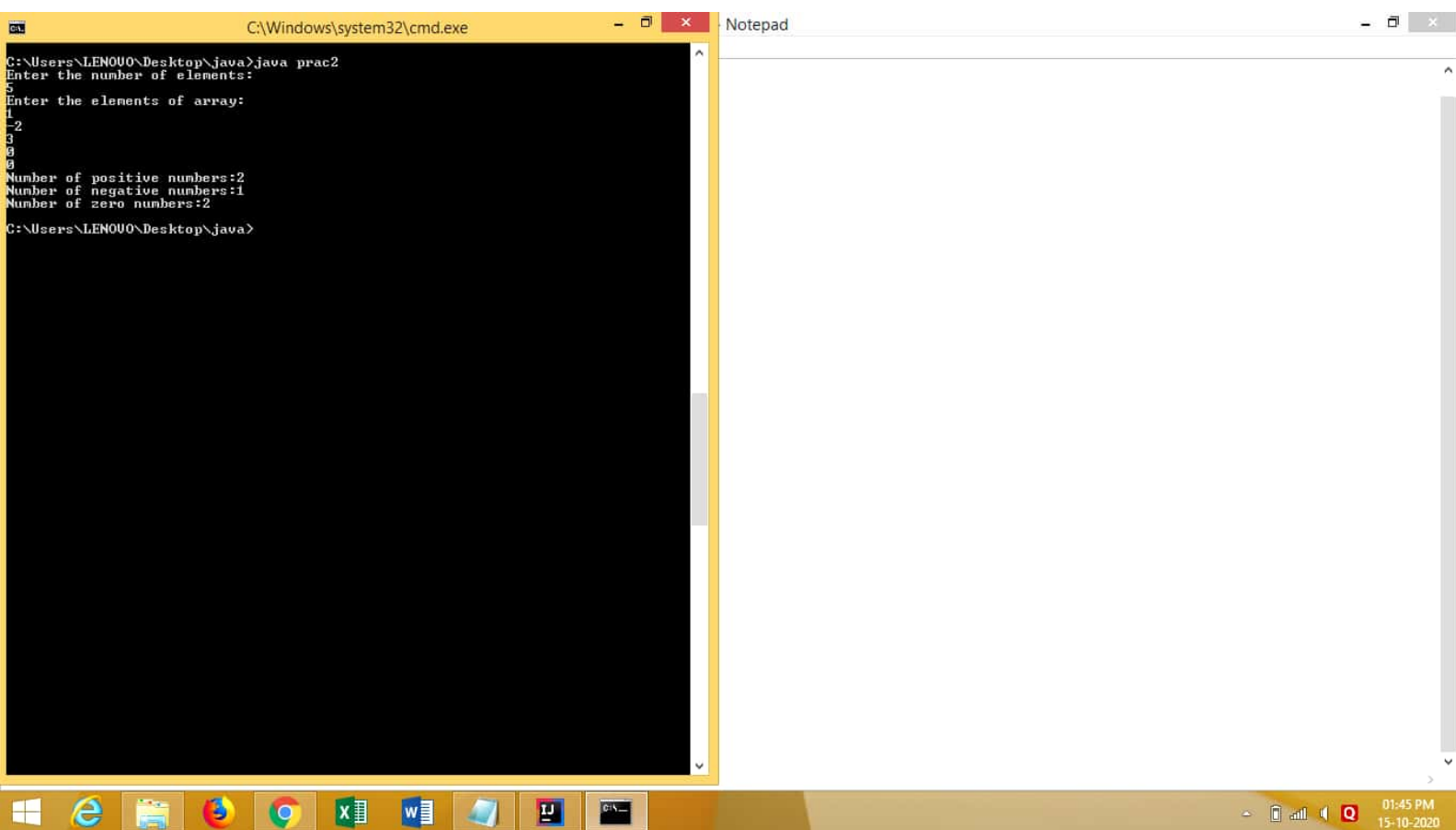
    public static void main(String[] args) {
        int n;
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the number of elements:");
        n = sc.nextInt();
        int [] arr;
        arr = new int[n];
        System.out.println("Enter the elements of array:");
        for(int i=0;i<n;i++)
        {
            arr[i]=sc.nextInt();
        }

        int pos = 0;
        int neg = 0;
        int zer = 0;

        for(int i=0;i<n;i++)
        {
            if(arr[i] > 0)
                pos ++;
            else if(arr[i] < 0)
                neg ++;
            else
                zer++;
        }

        System.out.println("Number of positive numbers:"+pos);
        System.out.println("Number of negative numbers:"+neg);
        System.out.println("Number of zero numbers:"+zer);
    }
}
```

Windows taskbar icons: File Explorer, Google Chrome, Microsoft Excel, Microsoft Word, Notepad, Task Manager, Command Prompt. System tray: Network, Volume, Notification Area Icons, Date and Time: 01:45 PM 15-10-2020.



```
prc3 - Notepad
File Edit Format View Help
import java.util.Scanner;

public class prc3 {

    public static void main(String[] args) {
        int n;
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the number of items purchased:");
        n = sc.nextInt();
        int [] arr1;
        double [] arr2;
        arr1 = new int[n];
        arr2 = new double[n];
        double tot_amt = 0.0;
        double final_amt = 0.0;
        System.out.println("Enter the cost of each item:");
        for(int i=0;i<n;i++)
        {
            arr2[i]=sc.nextDouble();
        }
        System.out.println("Enter the quantity of each item:");
        for(int i=0;i<n;i++)
        {
            arr1[i]=sc.nextInt();
        }
        for(int i=0;i<n;i++)
        {
            tot_amt += arr1[i]*arr2[i];
        }
        if(tot_amt>=10000)
        {
            final_amt = tot_amt - tot_amt*0.05;
        }

        else if(tot_amt>=7500 && tot_amt<10000)
        {

```

```
prc3 - Notepad
File Edit Format View Help

arr1 = new int[n];
arr2 = new double[n];
double tot_amt = 0.0;
double final_amt = 0.0;
System.out.println("Enter the cost of each item:");
for(int i=0;i<n;i++)
{
    arr2[i]=sc.nextDouble();
}
System.out.println("Enter the quantity of each item:");
for(int i=0;i<n;i++)
{
    arr1[i]=sc.nextInt();
}
for(int i=0;i<n;i++)
{
    tot_amt += arr1[i]*arr2[i];
}
if(tot_amt>=10000)
{
    final_amt = tot_amt - tot_amt*0.05;
}

else if(tot_amt>=7500 && tot_amt<10000)
{
    final_amt = tot_amt - tot_amt*0.03;
}
else if(tot_amt>=5000)
{
    final_amt = tot_amt - tot_amt*0.02;
}

System.out.println("Final Amount:"+final_amt);
}
}
```

Windows taskbar icons: File Explorer, Google Chrome, Microsoft Excel, Microsoft Word, and a terminal icon. System tray shows network, volume, and a red 'Q' icon. Date and time: 01:48 PM, 15-10-2020.

```
C:\Windows\system32\cmd.exe
C:\Users\LENOVO\Desktop\java>java prac3
Enter the number of items purchased:
5
Enter the cost of each item:
5000
477
5667
21
11
Enter the quantity of each item:
2
1
1
3
3
Final Amount:15428.0
C:\Users\LENOVO\Desktop\java>_
```

Enter the quantity of each item:");

arr2[i];

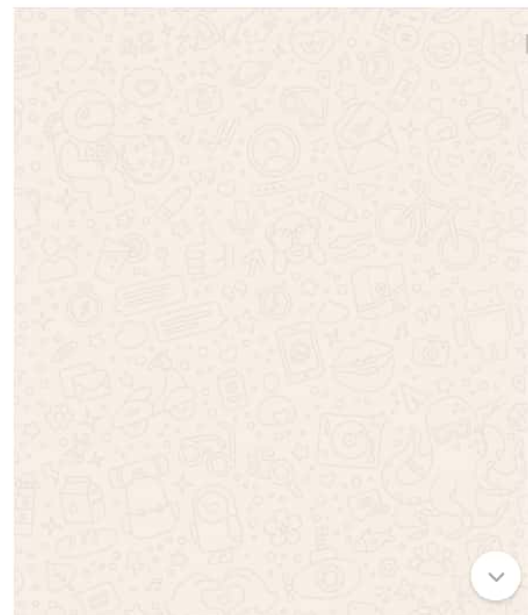
- tot_amt*0.05;

&& tot_amt<10000)

- tot_amt*0.03;

- tot_amt*0.02;

Final Amount:"+final_amt);



```
prac4 - Notepad
File Edit Format View Help
import java.util.Scanner;

public class prac4 {

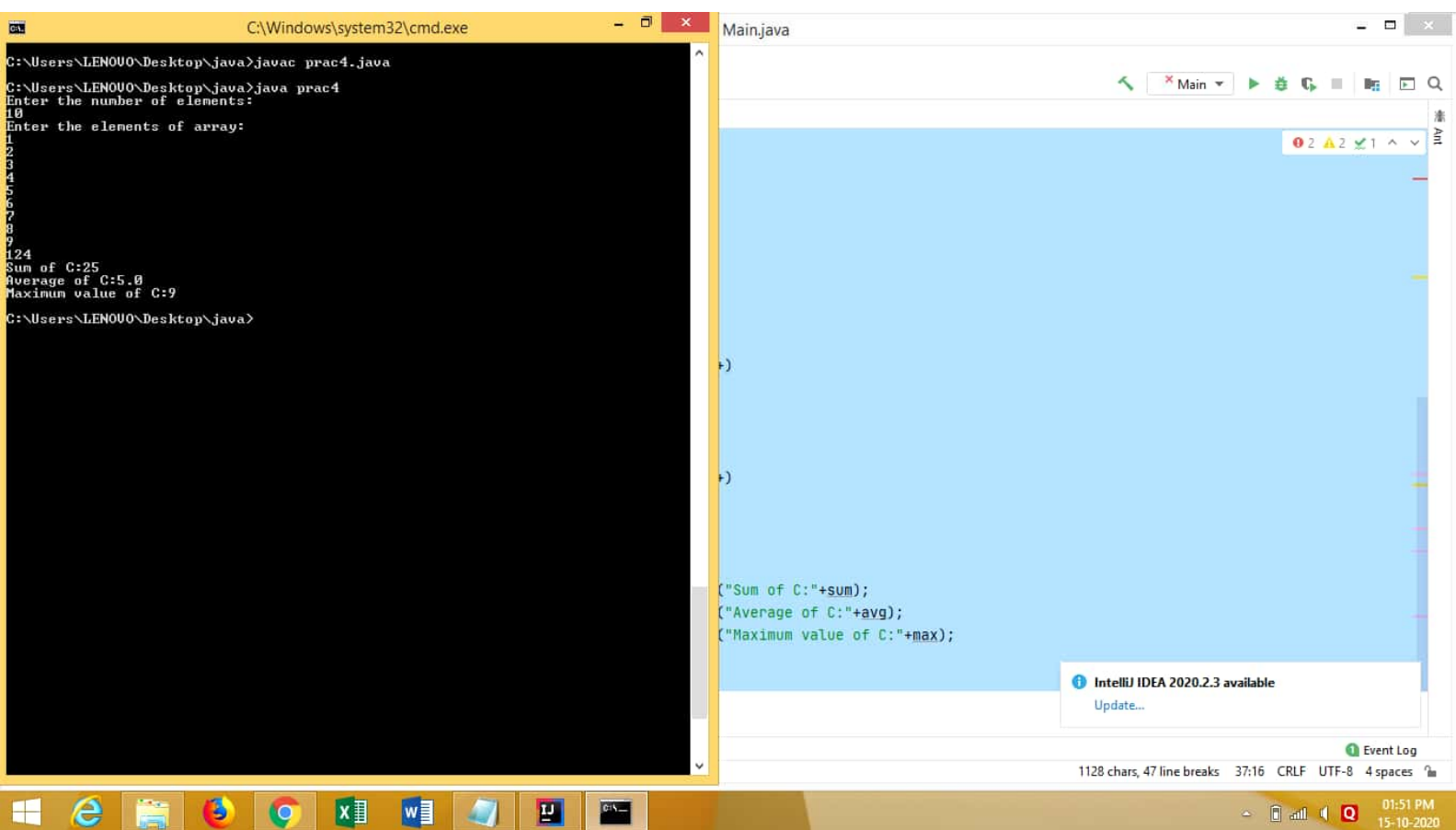
    public static void main(String[] args) {
        int n;
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter the number of elements:");
        n = sc.nextInt();
        int [] a;
        int [] b;
        int [] c;
        a = new int[n];
        b = new int[n];
        c = new int[n];
        int k=0,h=0;
        System.out.println("Enter the elements of array:");
        for(int i=0;i<n;i++)
        {
            a[i]=sc.nextInt();
            if(a[i]%2==0) {
                c[k] = a[i];
                k++;
            }
            else{
                b[h]=a[i];
                h++;
            }
        }
        int sum=0;
        double avg = 0.0;
        int max = -9999;
        for(int i=0;i<h;i++)
        {
            sum += b[i];
        }
    }
}
```



```
prac4 - Notepad
File Edit Format View Help

a = new int[n];
b = new int[n];
c = new int[n];
int k=0,h=0;
System.out.println("Enter the elements of array:");
for(int i=0;i<n;i++)
{
    a[i]=sc.nextInt();
    if(a[i]%2==0) {
        c[k] = a[i];
        k++;
    }
    else{
        b[h]=a[i];
        h++;
    }
}
int sum=0;
double avg = 0.0;
int max = -9999;
for(int i=0;i<h;i++)
{
    sum += b[i];
}
avg = (sum*1.0)/k;
for(int i=0;i<h;i++)
{
    if(b[i]>max)
        max=b[i];
}
System.out.println("Sum of C:"+sum);
System.out.println("Average of C:"+avg);
System.out.println("Maximum value of C:"+max);
}
}
```

Windows taskbar icons: File Explorer, Google Chrome, Microsoft Excel, Microsoft Word, and a terminal icon. System tray shows network, volume, and power icons. Date and time: 01:51 PM, 15-10-2020.



```
prac5 - Notepad
File Edit Format View Help
import java.util.Scanner;

class Player
{
    String id;
    String name;
    int [] scores;
    int no_matches_played;
    int sum = 0;
    double avg = 0.0;

    public Player(String id, String name, int[] scores, int no_matches_played) {
        this.id = id;
        this.name = name;
        this.scores = scores;
        this.no_matches_played = no_matches_played;
    }

    void cal_avg()
    {
        for(int i=0;i<scores.length;i++)
        {
            sum += scores[i];
        }
        avg = sum*1.0/no_matches_played;
    }

    void dis_avg()
    {
        System.out.println("The average score of "+ name + " is " +avg);
    }
}

public class prac5
{
    public static void main(String args[])
    {
    }
}
```

```
prac5 - Notepad
File Edit Format View Help

}
void dis_avg()
{
    System.out.println("The average score of "+ name + " is " +avg);
}

}
public class prac5
{
    public static void main(String args[])
    {
        String id;
        String name;
        int [] scores;
        int no_matches_played;

        Scanner sc = new Scanner(System.in);
        System.out.print("Enter player's name:");
        name = sc.nextLine();
        System.out.print("Enter player's id:");
        id = sc.nextLine();
        System.out.print("Enter the number of matches played:");
        no_matches_played = sc.nextInt();
        scores = new int[no_matches_played];
        System.out.println("Enter the scores of player");
        for(int i=0;i<no_matches_played;i++)
        {
            int number = sc.nextInt();
            scores[i] = number;
        }
        Player p = new Player(id,name,scores,no_matches_played);
        p.cal_avg();
        p.dis_avg();
    }
}
```

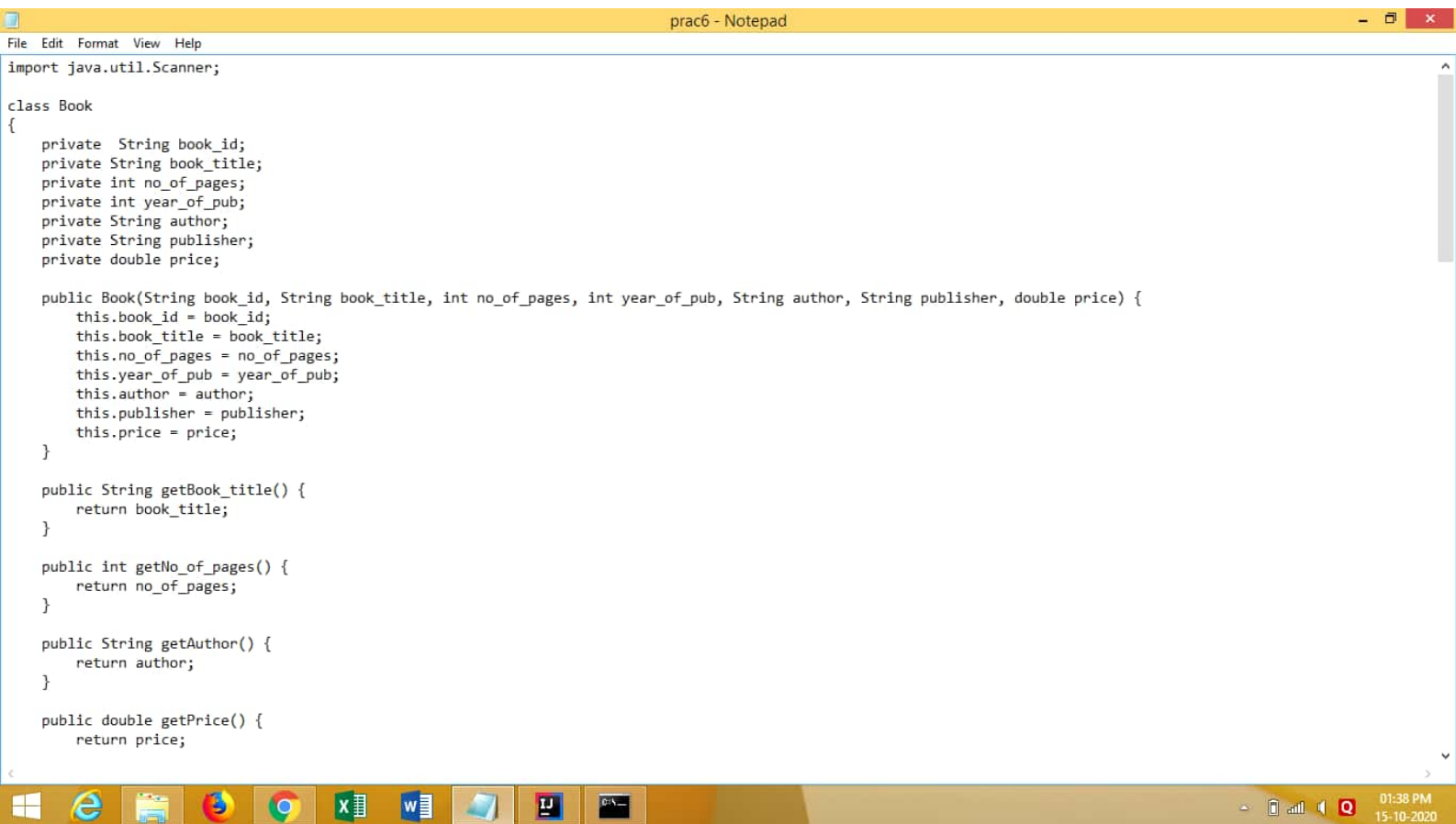
Windows taskbar icons: File Explorer, Google Chrome, Microsoft Excel, Microsoft Word, and a terminal icon. System tray shows network, volume, and a red 'Q' icon. Date and time: 01:33 PM, 15-10-2020.

```
C:\Windows\system32\cmd.exe

C:\Users\LENOVO\Desktop\java>javac prac5
error: Class names, 'prac5', are only accepted if annotation processing is explicitly requested
1 error

C:\Users\LENOVO\Desktop\java>javac prac5.java

C:\Users\LENOVO\Desktop\java>java prac5
Enter player's name:rev
Enter player's id:972001
Enter the number of matches played:5
Enter the scores of player
98
90
99
89
97
The average score of rev is 94.6
C:\Users\LENOVO\Desktop\java>_
```



```
File Edit Format View Help
import java.util.Scanner;

class Book
{
    private String book_id;
    private String book_title;
    private int no_of_pages;
    private int year_of_pub;
    private String author;
    private String publisher;
    private double price;

    public Book(String book_id, String book_title, int no_of_pages, int year_of_pub, String author, String publisher, double price) {
        this.book_id = book_id;
        this.book_title = book_title;
        this.no_of_pages = no_of_pages;
        this.year_of_pub = year_of_pub;
        this.author = author;
        this.publisher = publisher;
        this.price = price;
    }

    public String getBook_title() {
        return book_title;
    }

    public int getNo_of_pages() {
        return no_of_pages;
    }

    public String getAuthor() {
        return author;
    }

    public double getPrice() {
        return price;
    }
}
```

Windows taskbar icons: File Explorer, Google Chrome, Microsoft Excel, Microsoft Word, and a terminal window. System tray shows network, volume, and battery status. System clock: 01:38 PM, 15-10-2020.

```
prac6 - Notepad
File Edit Format View Help

}

public int getYear_of_pub() {
    return year_of_pub;
}


void display()
{
    System.out.println("Book ID:"+book_id);
    System.out.println("Book Title:"+book_title);
    System.out.println("Number of Pages:"+no_of_pages);
    System.out.println("Year of Publication:"+year_of_pub);
    System.out.println("Author:"+author);
    System.out.println("Publisher:"+publisher);
    System.out.println("Price:"+price);
    System.out.println("-----");
}
}

public class prac6 {
    public static void main(String args[]) {
        String book_id;
        String book_title;
        int no_of_pages;
        int year_of_pub;
        String author;
        String publisher;
        double price;
        Scanner sc = new Scanner(System.in);
        Book [] b = new Book[3];
        for(int i=0;i<3;i++) {
            System.out.print("Enter book id:");
            book_id = sc.nextLine();
            System.out.print("Enter book title:");
            book_title = sc.nextLine();
            System.out.print("Enter the number of pages of book:");
            no_of_pages = sc.nextInt();
        }
    }
}
```

```
prac6 - Notepad
File Edit Format View Help

    book_title = sc.nextLine();
    System.out.print("Enter the number of pages of book:");
    no_of_pages = sc.nextInt();
    System.out.print("Enter the year of publication:");
    year_of_pub = sc.nextInt();
    sc.nextLine();
    System.out.print("Enter author's name:");
    author = sc.nextLine();
    System.out.print("Enter publisher's name:");
    publisher = sc.nextLine();
    System.out.print("Enter price of book:");
    price = sc.nextDouble();
    sc.nextLine();

    b[i] = new Book(book_id, book_title, no_of_pages, year_of_pub, author, publisher, price);
    System.out.println("-----");
}
for(int i=0;i<3;i++)
{
    b[i].display();
}
System.out.println("Enter the author's name to display details:");
String check_author = sc.nextLine();
for(int i=0;i<3;i++)
{
    if(check_author == b[i].getAuthor())
        b[i].display();
}
double max = -999.00;
for(int i=0;i<3;i++)
{
    if(b[i].getPrice()>max)
        max = b[i].getPrice();
}
for(int i=0;i<3;i++)
{
```



prac6 - Notepad

```
File Edit Format View Help

{
    if(check_author == b[i].getAuthor())
        b[i].display();
}
double max = -999.00;
for(int i=0;i<3;i++)
{
    if(b[i].getPrice()>max)
        max = b[i].getPrice();
}
for(int i=0;i<3;i++)
{
    if(b[i].getPrice()==max)
        b[i].display();
}
int count = 0;
for(int i=0;i<3;i++)
{
    if(b[i].getYear_of_pub()==2020)
        count++;
}
System.out.println("The number of books published in 2020:"+count);
int least = 9999999;
for(int i=0;i<3;i++)
{
    if(b[i].getNo_of_pages()<least)
        least = b[i].getNo_of_pages();
}
for(int i=0;i<3;i++)
{
    if(b[i].getNo_of_pages()==least)
        b[i].display();
}
}
}
```

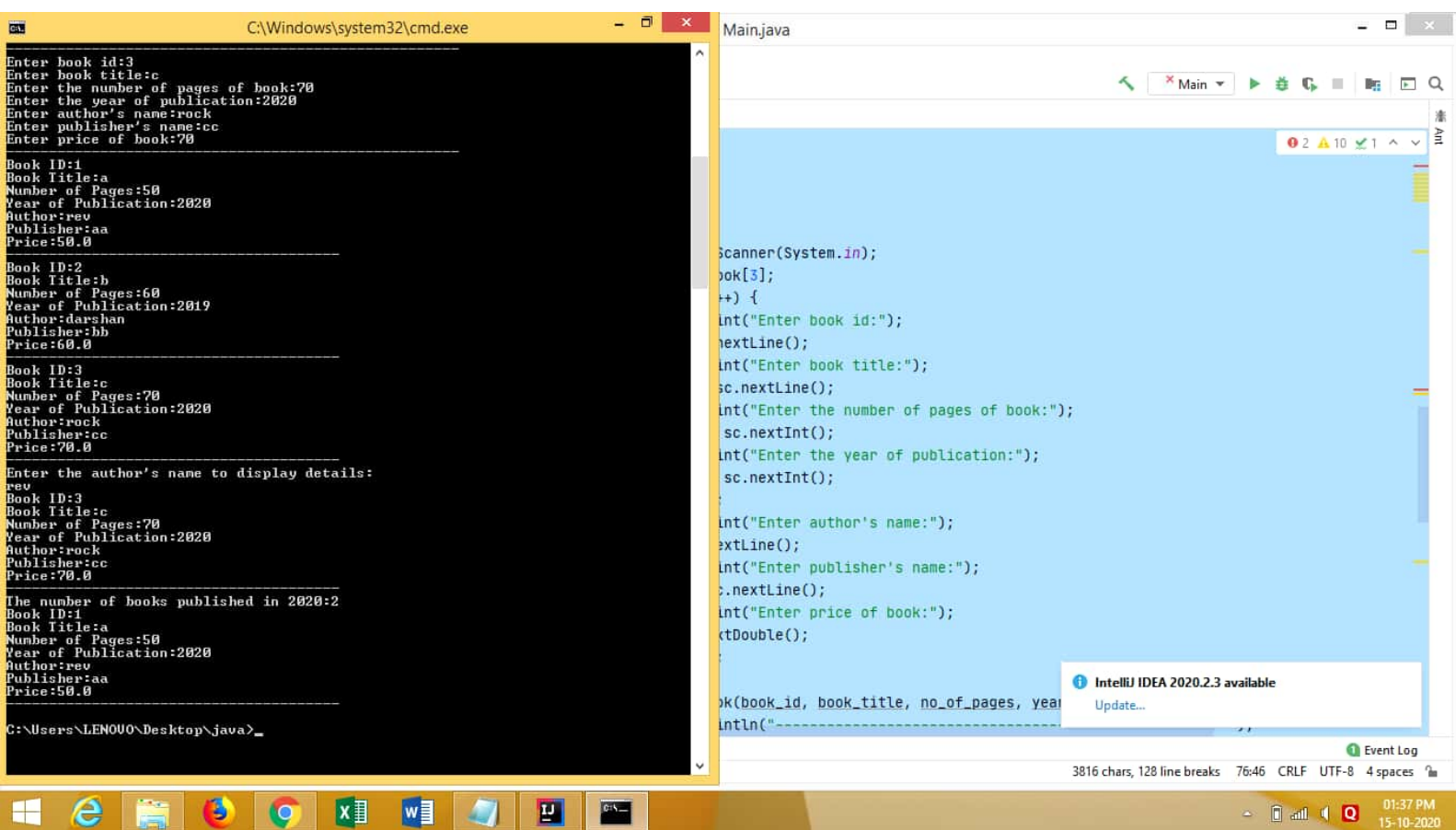
Windows taskbar icons: File Explorer, Google Chrome, Microsoft Excel, Microsoft Word, and a terminal icon. System tray shows network, volume, and a red 'Q' icon. Date and time: 01:38 PM 15-10-2020.

The screenshot shows a Windows desktop with two windows open. The left window is a command prompt titled 'C:\Windows\system32\cmd.exe' showing the execution of Java programs. The right window is an IDE titled 'Main.java' showing Java code for a book management system. The taskbar at the bottom includes icons for Windows, Edge, File Explorer, Chrome, Excel, Word, and other applications. The system tray shows the time as 01:37 PM on 15-10-2020.

```
C:\Users\LENOVO\Desktop\java>java prac5
Enter player's name:rev
Enter player's id:972001
Enter the number of matches played:5
Enter the scores of player
98
99
89
97
The average score of rev is 94.6
C:\Users\LENOVO\Desktop\java>clear
C:\Users\LENOVO\Desktop\java>javac prac6.java
C:\Users\LENOVO\Desktop\java>java prac6
Enter book id:1
Enter book title:a
Enter the number of pages of book:50
Enter the year of publication:2020
Enter author's name:rev
Enter publisher's name:aa
Enter price of book:50
-----
Enter book id:2
Enter book title:b
Enter the number of pages of book:60
Enter the year of publication:2019
Enter author's name:darshan
Enter publisher's name:bb
Enter price of book:60
-----
Enter book id:3
Enter book title:c
Enter the number of pages of book:70
Enter the year of publication:2020
Enter author's name:rock
Enter publisher's name:cc
Enter price of book:70
-----
Book ID:1
Book Title:a
Number of Pages:50
Year of Publication:2020
Author:rev
Publisher:aa
Price:50.0
-----
Book ID:2
Book Title:b
Number of Pages:60
Year of Publication:2019
Author:darshan
Publisher:bb
Price:60.0
-----

Scanner(System.in);
book[3];
++) {
int("Enter book id:");
nextLine();
int("Enter book title:");
sc.nextLine();
int("Enter the number of pages of book:");
sc.nextInt();
int("Enter the year of publication:");
sc.nextInt();
:
int("Enter author's name:");
extLine();
int("Enter publisher's name:");
c.nextLine();
int("Enter price of book:");
ctDouble();

k(book_id, book_title, no_of_pages, year
intLn("-----")
```



```
Enter book id:3
Enter book title:c
Enter the number of pages of book:70
Enter the year of publication:2020
Enter author's name:rock
Enter publisher's name:cc
Enter price of book:70

Book ID:1
Book Title:a
Number of Pages:50
Year of Publication:2020
Author:rev
Publisher:aa
Price:50.0

Book ID:2
Book Title:b
Number of Pages:60
Year of Publication:2019
Author:darshan
Publisher:bb
Price:60.0

Book ID:3
Book Title:c
Number of Pages:70
Year of Publication:2020
Author:rock
Publisher:cc
Price:70.0

Enter the author's name to display details:
rev
Book ID:3
Book Title:c
Number of Pages:70
Year of Publication:2020
Author:rock
Publisher:cc
Price:70.0

The number of books published in 2020:2
Book ID:1
Book Title:a
Number of Pages:50
Year of Publication:2020
Author:rev
Publisher:aa
Price:50.0

C:\Users\LENOVO\Desktop>java _
```

```
Main.java

Scanner(System.in);
book[3];
++) {
int("Enter book id:");
nextLine();
int("Enter book title:");
sc.nextLine();
int("Enter the number of pages of book:");
sc.nextInt();
int("Enter the year of publication:");
sc.nextInt();

int("Enter author's name:");
extLine();
int("Enter publisher's name:");
c.nextLine();
int("Enter price of book:");
ctDouble();

k(book_id, book_title, no_of_pages, year
intLn("--
```

IntelliJ IDEA 2020.2.3 available
Update...

3816 chars, 128 line breaks 76:46 CRLF UTF-8 4 spaces

Event Log

01:37 PM
15-10-2020