
Name : Amit Bandu Swami

Roll no: 2221018

Batch : A

Assignment 7: Department maintains a student information. Write a Java program to write records to the file and read students records from file demonstrating I/O management through File and stream classes

```
import java.io.*;

import java.util.*;

class students{

    String name;

    int rollno,physics,chemistry,maths;

    static BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

    public students()

    {

        rollno=-1;

        physics=-1;

        chemistry=-1;

        maths=-1;

    }

    public void add() throws IOException

    {

        PrintWriter pw = new PrintWriter(new BufferedWriter(new

        FileWriter("studentRecord.txt",true)));

        System.out.print("ENTER THE NAME : ");
```

```

name = br.readLine();

System.out.print("ENTER THE ROLL NO : ");

rollno = Integer.parseInt(br.readLine());

System.out.print("ENTER THE MARKS OBTAINED IN PHYSICS : ");

physics = Integer.parseInt(br.readLine());

System.out.print("ENTER THE MARKS OBTAINED IN CHEMISTRY : ");

chemistry = Integer.parseInt(br.readLine());

System.out.print("ENTER THE MARKS OBTAINED IN MATHS : ");

maths = Integer.parseInt(br.readLine());

pw.println(rollno+"    "+name+"    "+physics+"    "+chemistry+"    "+maths);

System.out.print("\n Records added successfully !\n ");

pw.close();

}

```

public void display() throws IOException

```

{

    try{

        BufferedReader file = new BufferedReader(new FileReader("studentRecord.txt"));

        String currentLine;

        int i=1;

        while((currentLine = file.readLine()) != null)

        {

            System.out.println(currentLine);

            System.out.println("    ");

        }

    }

}

```

```

    }
}
catch(FileNotFoundException e)
{
    System.out.println("\nERROR : File not Found !!!");
}
}

```

```

public void search() throws IOException

```

```

{
    try{

        BufferedReader file =new BufferedReader(new FileReader("studentRecord.txt"));

        String currentline;

        String searchRoll;

        int flag=0;

        Scanner sc = new Scanner(System.in);

        System.out.print("Enter roll no of the student you want to search: ");

        searchRoll = sc.next();

        Scanner scan = new Scanner(new File("studentRecord.txt"));

        while(scan.hasNext())

        {

            String line = scan.nextLine();

            if(line.contains(searchRoll))

```

```

        {
            System.out.println(line);

            flag=1;

            break;

        }

    }

    if(flag==0)

    {

        System.out.println("FILE NOT FOUND ");

    }

    file.close();

}

catch(FileNotFoundException e)

{

    System.out.println("\nERROR : File not Found !!!");

}

}

}

```

```

public class studentsRecord extends students{

    public static void main(String args[]) throws IOException {

        Scanner sc = new Scanner(System.in);

        students ob = new students();
    }
}

```

```
while(true)
{
    System.out.println("----- MENU ----");

    System.out.println("1. ADD RECORD ");

    System.out.println("2. DISPLAY RECORD");

    System.out.println("3. SEARCH RECORD ");

    System.out.println("4. EXIT ");

    System.out.println("ENTER YOUR CHOICE : ");

    int ch = sc.nextInt();

    switch(ch){

        case 1: ob.add();

            break;

        case 2: System.out.println("roll name physics chemistry maths");

            ob.display();

            break;

        case 3: ob.search();

            break;

        case 4: System.exit(1);

    }

}

}
```

OUTPUT

```
run:
----- MENU -----
1. ADD RECORD
2. DISPLAY RECORD
3. SEARCH RECORD
4. EXIT
ENTER YOUR CHOICE :
1
ENTER THE NAME : KARAN
ENTER THE ROLL NO : 62
ENTER THE MARKS OBTAINED IN PHYSICS : 80
ENTER THE MARKS OBTAINED IN CHEMISTRY : 85
ENTER THE MARKS OBTAINED IN MATHS : 89

Records added successfully !
----- MENU -----
1. ADD RECORD
2. DISPLAY RECORD
3. SEARCH RECORD
4. EXIT
ENTER YOUR CHOICE :
1
ENTER THE NAME : CHINMAY
ENTER THE ROLL NO : 63
ENTER THE MARKS OBTAINED IN PHYSICS : 82
ENTER THE MARKS OBTAINED IN CHEMISTRY : 86
ENTER THE MARKS OBTAINED IN MATHS : 92

Records added successfully !
----- MENU -----
1. ADD RECORD
2. DISPLAY RECORD
3. SEARCH RECORD
4. EXIT
ENTER YOUR CHOICE :
2
roll  name  physics  chemistry  maths
62      KARAN      80        85         89

63      CHINMAY     82        86         92

----- MENU -----
1. ADD RECORD
2. DISPLAY RECORD
3. SEARCH RECORD
4. EXIT
ENTER YOUR CHOICE :
3
Enter roll no of the student you want to search: 62
62      KARAN      80        85         89
```