import java.io.\*;

import java.util.\*;

class Database {

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

public void addRecords() throws IOException {

PrintWriter pw = new PrintWriter(new BufferedWriter(new FileWriter("sample.txt",true)));

String studentname, address,s;

int studentid, rollno, Class;

float marks;

boolean addMore = false;

do {

System.out.print("\nEnter Student Name: ");

studentname = br.readLine();

System.out.print("Student Id: ");

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

System.out.print("Roll no: ");

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

System.out.print("Address: ");

address = br.readLine();

System.out.print("Class: ");

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

System.out.print("Marks : ");

marks = Float.parseFloat(br.readLine());

pw.println(studentname+" "+studentid+" "+rollno+" "+address+" "+Class+" "+marks);

System.out.print("\nRecords added successfully !\n\nDo you want to add more records ? (y/n) : ");

s = br.readLine();

if(s.equalsIgnoreCase("y")){

addMore = true;

System.out.println();

}

else

addMore = false; modify addmore

}

while(addMore);

pw.close();

}

public void readRecords() throws IOException {

try {

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

String name;

int i=1;

while((name = file.readLine()) != null) {

System.out.println(name);

System.out.println("");

} file.close();

}

catch(FileNotFoundException e){

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

}

}

public void searchRecords() throws IOException {

try {

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

String name;

int flag=0;

Scanner sc=new Scanner(System.in);

System.out.print("Enter an id of the student you want to search: ");

String searchname=sc.next();

while((name = file.readLine()) != null) {

String[] line = name.split(" ");

if(searchname.equalsIgnoreCase(line[1])){

System.out.println("Record found");

System.out.println(name);

System.out.println("");

flag=1;

break;

}

}

if(flag==0)

System.out.println("Record not found");

file.close();

}

catch(FileNotFoundException e) {

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

}

}

public void deleteRecords() throws IOException {

try {

BufferedReader file1 = new BufferedReader(new FileReader("sample.txt"));

PrintWriter pw = new PrintWriter(new BufferedWriter(new FileWriter("new.txt",true)));

String name;

int flag=0;

Scanner sc=new Scanner(System.in);

System.out.print("Enter the name of the student you want to delete: ");

String searchname=sc.next();

while((name = file1.readLine()) != null) {

String[] line = name.split(" ");

if(!searchname.equalsIgnoreCase(line[0])){

pw.println(name);

flag=0;

}

else{

System.out.println("Record found");

flag=1;

}

} file1.close();

pw.close();

File delName = new File("sample.txt");

File oldName = new File("new.txt");

File newName = new File("sample.txt");

if(delName.delete())

System.out.println("deleted successfully");

else

System.out.println("Error");

if (oldName.renameTo(newName))

System.out.println("Renamed successfully");

else

System.out.println("Error");

}

catch(FileNotFoundException e) {

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

}

}

public void updateRecords() throws IOException {

try {

BufferedReader file1 = new BufferedReader(new FileReader("sample.txt"));

PrintWriter pw = new PrintWriter(new BufferedWriter(new FileWriter("new.txt",true)));

String name;

int flag=0;

Scanner sc=new Scanner(System.in);

System.out.print("Enter the name of the student you want to update: ");

String searchname=sc.next();

while((name = file1.readLine()) != null) {

String[] line = name.split(" ");

if(!searchname.equalsIgnoreCase(line[0])){

flag=0;

else

{

System.out.println("Record found");

System.out.print("Enter updated marks: ");

String up\_mark=sc.next();

pw.println(line[0]+" "+line[1]+" "+line[2]+" "+line[3]+" "+line[4]+" "+up\_mark);

flag=1;

}

file1.close();

pw.close();

File delName = new File("sample.txt");

File oldName = new File("new.txt");

File newName = new File("sample.txt");

if(delName.delete())

System.out.println("record updated successfully");

else

System.out.println("Error");

if (oldName.renameTo(newName))

System.out.println("Renamed successfully");

else

System.out.println("Error");

}

catch(FileNotFoundException e) {

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

}

}

public void clear(String filename) throws IOException {

PrintWriter pw = new PrintWriter(new BufferedWriter(new FileWriter(filename)));

pw.close();

System.out.println("\nAll Records cleared successfully !");

}

}

public class Main{

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

Database f = new Database();

Scanner sc =new Scanner(System.in);

System.out.println("");

while(true) {

System.out.print("1. Add Records\n2. Display Records\n3. Clear All Records\n4. Search Records"

+ "\n5. Delete Records\n6. Update Records \n7. Exit\n\nEnter your choice : ");

int choice = sc.nextInt();

System.out.println("");

switch(choice) {

case 1:

f.addRecords();

break;

case 2:

f.readRecords();

break;

case 3:

f.clear("sample.txt");

break;

case 4:

f.searchRecords();

break;

case 5:

f.deleteRecords();

break;

case 6:

f.updateRecords();

break;

case 7:

System.exit(0);

default:

System.out.println("\nInvalid Choice !"); /

break;

}

}

}

}

OUTPUT

1. Add Records

2. Display Records

3. Clear All Records

4. Search Records

5. Delete Records

6. Update Records

7. Exit

Enter your choice : 3

All Records cleared successfully !

1. Add Records

2. Display Records

3. Clear All Records

4. Search Records

5. Delete Records

6. Update Records

7. Exit

Enter your choice : 1

Enter Student Name: Sarthak

Student Id: 12

Roll no: 12

Address: pune

Class: 10

Marks : 489

Records added successfully !

Do you want to add more records ? (y/n) : y

Enter Student Name: om

Student Id: 34

Roll no: 34

Address: jalgaon

Class: 9

Marks : 479

Records added successfully !

Do you want to add more records ? (y/n) : y

Enter Student Name: Atul

Student Id: 67

Roll no: 67

Address: Aurangabad

Class: 9

Marks : 467

Records added successfully !

Do you want to add more records ? (y/n) : y

Enter Student Name: Naveen

Student Id: 76

Roll no: 76

Address: Dhule

Class: 10

Marks : 495

Records added successfully !

Do you want to add more records ? (y/n) : y

Enter Student Name: Jatin

Student Id: 39

Roll no: 39

Address: Satara

Class: 11

Marks : 481

Records added successfully !

Do you want to add more records ? (y/n) : n

1. Add Records

2. Display Records

3. Clear All Records

4. Search Records

5. Delete Records

6. Update Records

7. Exit

Enter your choice : 2

Sarthak 12 12 pune 10 489.0

om 34 34 jalgaon 9 479.0

Atul 67 67 Aurangabad 9 467.0

Naveen 76 76 Dhule 10 495.0

Jatin 39 39 Satara 11 481.0

1. Add Records

2. Display Records

3. Clear All Records

4. Search Records

5. Delete Records

6. Update Records

7. Exit

Enter your choice : 4

Enter an id of the student you want to search: 34

Record found

om 34 34 jalgaon 9 479.0

1. Add Records

2. Display Records

3. Clear All Records

4. Search Records

5. Delete Records

6. Update Records

7. Exit

Enter your choice : 4

Enter an id of the student you want to search: 66

Record not found

1. Add Records

2. Display Records

3. Clear All Records

4. Search Records

5. Delete Records

6. Update Records

7. Exit

Enter your choice : 5

Enter the name of the student you want to delete: om

Record found

deleted successfully

Renamed successfully

1. Add Records

2. Display Records

3. Clear All Records

4. Search Records

5. Delete Records

6. Update Records

7. Exit

Enter your choice : 6

Enter the name of the student you want to update: Sarthak

Record found

Enter updated marks: 500

record updated successfully

Renamed successfully

1. Add Records

2. Display Records

3. Clear All Records

4. Search Records

5. Delete Records

6. Update Records

7. Exit

Enter your choice : 3

All Records cleared successfully !

1. Add Records

2. Display Records

3. Clear All Records

4. Search Records

5. Delete Records

6. Update Records

7. Exit

Enter your choice : 7