**import** java.io.FileNotFoundException;

**import** java.io.File;

**import** java.util.Formatter;

**import** java.util.Scanner;

/\*

This program read student data from an existing file and print the student results to two files

\*/

**public** **class** StudentResults {

**private** **static** Scanner *infile*;

**private** **static** Formatter *outfile1*;

**private** **static** Formatter *outfile2*;

**public** **static** **void** main(String[] args){

//Opening file for reading data in it by using a Scanner object

**try**{

*infile* = **new** Scanner(**new** File("C:/JavaPrograms/FileManipulation/student.txt"));

}

**catch** (FileNotFoundException fnfe){

System.*out*.println("Error Creating File");

System.*exit*(1);

}

// Opening file for writing data in it by using a formatter object

**try**{

*outfile1* = **new** Formatter("passstudent.txt");

*outfile2* = **new** Formatter("failstudent.txt");

}

**catch** (SecurityException se) {

System.*out*.println("You do have access to this file");

System.*exit*(1);

}

**catch** (FileNotFoundException fnfe) {

System.*out*.println("Error Creating File");

System.*exit*(1);

}

String fname, lname, gender;

**int** physics, chemistry, maths;

String phoneNo;

**int** passcount = 0;

**int** averagemark=0;

String dummy ="";

//Reading information about each student

**while** (*infile*.hasNext()){

fname = *infile*.next();

lname = *infile*.next();

gender = *infile*.next();

physics = *infile*.nextInt();

chemistry = *infile*.nextInt();

maths = *infile*.nextInt();

phoneNo = *infile*.next();

dummy = *infile*.nextLine(); //advance cursor to fresh line

**if** (physics >= 40)

passcount++;

**if** (chemistry >= 40)

passcount++;

**if** (maths >= 40)

passcount++;

//output student data to respective file

**if** (passcount ==3){

averagemark = (physics+chemistry+maths)/3;

*outfile1*.format("%s %s %s %s %d \n", fname, lname, gender, phoneNo, averagemark);}

**else**{

*outfile2*.format("%s %s %s %s %d \n", fname, lname, gender, phoneNo, passcount);}

passcount = 0;

}

*infile*.close();

*outfile1*.close();

*outfile2*.close();

}

}