package lab2grades;

/\*

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CS232-001

lab2grades.java

The purpose of this program is to call upon an outside txt file full of student

grades. The program will then aceept all the numbers within that txt and seperate

them into grade ranges, afterwords it will take the total number of students and

seperate them into how many got within each range, printing this information out

to the end user.

Sunday, September 5, 2021 at 11:59 PM

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//standard import java procedures

import java.io.IOException;

import java.nio.file.Paths;

import java.util.Scanner;

public class Lab2Grades

{

//'throws IOException' addition to the 'public static void' to make use of the outside file

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

{

//declaring all variables necessary to perform grade and range calculation

int grade;

int totalGrades;

int rangeOne, rangeTwo, rangeThree, rangeFour, rangeFive, rangeSix, rangeSeven, rangeEight;

rangeOne = rangeTwo = rangeThree = rangeFour = rangeFive = rangeSix = rangeSeven = rangeEight = 0;

//referring the scanner to the root folder for the txt file

Scanner in = new Scanner(Paths.get("lab2\_input.txt"), "UTF-8");

//telling the code to go past the total number '26' so it doesn't confuse it with grades

totalGrades = in.nextInt();

//calculation phase utilizing 'while' and 'if' code

while (in.hasNext())

{

grade = in.nextInt();

if(grade >= 0 && grade <= 24)

{

rangeOne += 1;

}

else if(grade >= 25 && grade <= 49)

{

rangeTwo += 1;

}

else if(grade >= 50 && grade <= 74)

{

rangeThree += 1;

}

else if(grade >= 75 && grade <= 99)

{

rangeFour += 1;

}

else if(grade >= 100 && grade <= 124)

{

rangeFive += 1;

}

else if(grade >= 125 && grade <= 149)

{

rangeSix += 1;

}

else if(grade >= 150 && grade <= 174)

{

rangeSeven += 1;

}

else

{

rangeEight += 1;

}

}

//Output phase after calculations

System.out.println("[0 - 24]: " + rangeOne);

System.out.println("[25 - 49]: " + rangeTwo);

System.out.println("[50 - 74]: " + rangeThree);

System.out.println("[75 - 99]: " + rangeFour);

System.out.println("[100 - 124]: " + rangeFive);

System.out.println("[125 - 149]: " + rangeSix);

System.out.println("[150 - 174]: " + rangeSeven);

System.out.println("[175 - 200]: " + rangeEight);

}

}