Title

Check student's data format.

Background

N/A

Program Specifications

Create a program allows input:

• Student information includes: Student name, class name, the marks Math, Physical and Chemistry in the range from 1 to 10.

Display on screen the information:

- Student Type following the conditions:
 - A: mark > 7.5.
 - B: 6 <= mark <= 7.5.
 - C: 4 <= mark < 6.
 - D: mark < 4.
- Student Type statistics by %.

Function details:

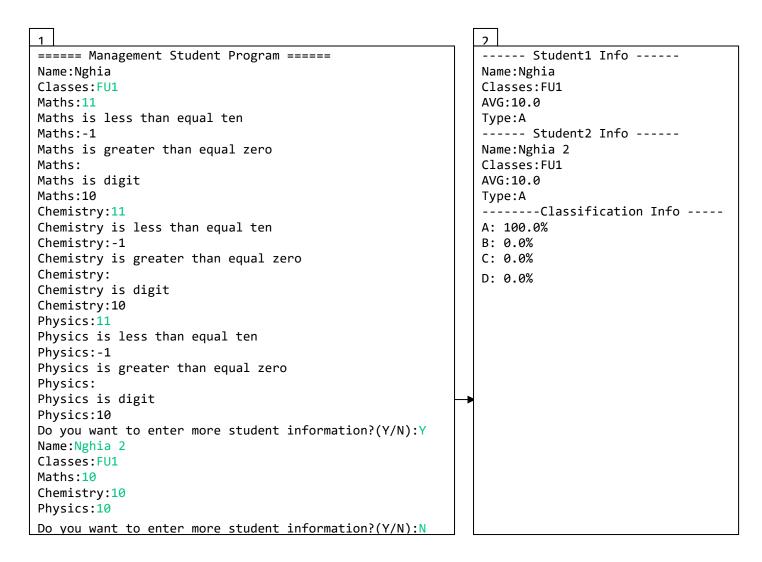
Function 1: Display GUI And Input Data.

- Users run the program. The program prompts users to input Student data.
- When users stop inputting Student data, next **Function 2**.

Function 2: Perform function

- The program classifies students and gives student rank statistics by %.
- Display notify result of students together with statistic result and exit the program.

Expectation of User interface:



Guidelines

Student must implement the methods

- createStudent
- averageStudent
- getPercentTypeStudent

in startup code.

Suggestion:

Create a class Student contains the following properties:

- Student Name, Class, Math, Physical, Chemistry, Average, Type.

Create a class Mark Calculation, classify students, calculate Student Type statistics, and set the results on Student object. Give the statistics:

A:? %

B:? %

C:? %

D:? %

Function1: Input student information

- Must create function: Student createStudent(String name, String classes, double maths, double chemistry, double physics)
 - Input:

> name: Student name

classes: Class.

> maths: Math mark.

> chemistry: Chemistry mark.

physics: Physical mark.

- Return:
 - > Student object.

Function 2: Student classification.

- Write Function: List<Student> averageStudent(List<Student> students)
 - Input:
 - > students: the list of students not classified yet.
 - Return: the list of students already classified.

Function3: Student Type Statistics.

- Must create function: HashMap<String, Double> getPercentTypeStudent(List<Student> students)
 - Input:
 - > students: the list of students already classified.
 - Return: Student Type statistics by % by the key A,B,C, D.