

```
import java.util.ArrayList;
import java.util.Collections;
import java.util.List;

public class School {
    private String name;
    private String[] address;
    private String
principalFirstName;
    private String
principalLastName;
    private List<MarksEntry> marksEntries;

    public School(String name, String[] address, String principal) {
        this.name = name;
        this.address = address;
        this.principalFirstName = principalFirstName;
        this.principalLastName = principalLastName;
        this.marksEntries = new ArrayList<>();
    }

    public String getName() {
        return name;
    }

    public String[] getAddress() {
        return address;
    }

    public String getPrincipal() {
        return principal;
    }

    public List<MarksEntry> getMarksEntries() {
        return marksEntries;
    }
}
```

```
public void addMarks(int year, String studentID, String studentName,  
String className, double score) {
```

```
    if (!marks.containsKey(year)) {  
        marks.put(year, new HashMap<>());  
    }  
    marks.get(year).put(studentID, score);  
}
```

```
public void addMarksEntry(MarksEntry marksEntry) {  
    marksEntries.add(marksEntry);  
}
```

```
public double getScoreForYear(int year) {  
    double totalScore = 0.0;  
    int count = 0;  
    for (MarksEntry entry : marksEntries)  
    {  
        if (entry.getYear() == year) {  
            totalScore += entry.getScore();  
            count++;  
        }  
    }  
    if (count == 0) {  
        return 0.0;  
    }  
    else {  
        return totalScore / count;  
    }  
}
```

```
public double getAverageScore() {  
    double totalScore = 0.0;  
    int count = 0;  
  
    for (MarksEntry entry : marksEntries){  
        totalScore += entry.getScore();  
        count++;  
    }
```

```

    }
    if (count == 0) {
    return 0.0;
    }
    else
    {
        return totalScore / count;
    }
}

```

```

public double getStandardDeviation() {
    double mean = getAverageScore();
    double sumOfSquaredDeviations = 0.0;

    for (MarksEntry entry : marksEntries) {
        sumOfSquaredDeviations += Math.pow(entry.getScore() -
mean, 2);
    }
    if (marksEntries.size() == 0) {
        return 0.0;
    } else {
        return Math.sqrt(sumOfSquaredDeviations /
marksEntries.size());
    }
}

```

```

public static void sortSchools(List<School> schools) {
    Collections.sort(schools, (s1, s2) ->
        Double.compare(s2.getAverageScore(),
s1.getAverageScore()));
    }
}

```