

Problem #1

Implement a class Student. Student has a name, id and a year of study. Provide a constructor with two parameters and create methods to access name, id and increment the year of study.

Problem #2

Write a class StarTriangle that can be used to generate the following triangular shape :

```
[*]  
[*][*]  
[*][*][*]  
[*][*][*][*]  
....
```

- Your class should have a constructor with a parameter width, that indicates the number of [*] in the last row of the triangle.
- Moreover, there must be a method `toString()` that computes a string representing the triangle and returns a string consisting of [*] and newline characters.

Class usage:

```
StarTriangle small = new StarTriangle(3);  
System.out.println(small.toString());
```

The output is:

```
[*]  
[*][*]  
[*][*][*]
```

Write a class Time that has the following fields : hour, minute, second . Also, you need to have a corresponding constructor and method that set the time according to provided hour, minute and second parameters (check for any invalid input). Moreover, you need to have two methods for time format conversion (Universal and Standard) and method to add two Time objects. It can be either static (in this case there will be 2 parameters of type Time, or it can be non-static instance method taking one Time parameter.

Universal: 14:23:22

Standard: 02:23:22 PM

Class usage:

```
Time t = new Time(23, 5, 6);
```

```
System.out.println(t.toUniversal())// prints "23:05:06"
```

```
System.out.println(t.toStandard());//prints "11:05:06 PM"
```

```
Time t2 = new Time(4, 24, 33);
```

```
t.add(t2);
```