

Smalltalk: A Reflective Language and System

Please submit this exercise to the git repository before 10h15, September 30, 2014. Don't forget to register to the [SDE student list](#).

Exercise 1

- What is the message that is sent to a superclass to create a subclass?
- What is the difference between a String and a Symbol object in Pharo? Why is it important?
- What is the accessibility of instance variables in Smalltalk?
- Write the equivalent of the following piece of code in Smalltalk, as a block, and execute it with values 3, 4, 5.

```
int grade;
if(grade < 4)
    return "fail";
else if (grade < 5)
    return "pass";
else if(grade < 6)
    return "good";
else if (grade == 6)
    return "excellent";
else
    return "grade is not correct";
```

Exercise 2

Based on the code from the lecture and exercise ([CallGraph-exercises.st](#), [Calls.txt](#)), write the appropriate source code and answer the following questions;

- Find the top 10 most frequently invoked methods.
- Find the top 10 methods invoked on the largest number of different objects.
- Find all static methods.
- Find all classes containing at least two methods.

Note: For these exercise please refer to Chapters 3 to 9 of the *Pharo by Example* book.