

## Monitored Assignment 2

Design and implement a class `UnlimitedInteger` which implements an integer number without size restrictions along the lines of Monitored Assignment 1. The internal state of an instance of `UnlimitedInteger` contains a `String` formatted as `"[+-]?\d+"`.

Apart from the usual trappings of a class, `UnlimitedInteger` has an interface offering

```
public UnlimitedInteger plus(UnlimitedInteger op)
public UnlimitedInteger times(UnlimitedInteger op)
```

Write a test program which accepts four `UnlimitedInteger`s `a`, `b`, `c`, and `x` and computes  $ax^2 + bx + c$ .

Your method implementation may only use the methods defined for class `String` in the course material. No conversion whatsoever into an internal numeric format is permitted.

Put in ample comments into your source code --- and, of course, the names of the group members. Write a one-page documentation for your program, also with at least the names of the group members, a full disclosure of your references, a description of the algorithms used, and your test results.

You don't need to print out anything --- your program should be ready to run on a student machine in C07, and the one-page documentation should be available as PDF file.

All group members must be present for the acceptance meeting --- you might have to answer questions.

**Acceptance Session: January 11, 2019 08:00 C07**