Mandatory 01

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1 The tasks

- Grammar stuff
    - **Task 1:** Add subtraction and division to the program.
    - **Task 2:** Implement condition branching, for loops and arrays.
- Compiler stuff
    - **Task 3:** Implement the stuff from task 1 into a java compiler.
    - **Task 4:** Implement variable assignment into a java compiler.

1.1 Grammar

I added the following constants.

```
PLUS    : '+'
MINUS   : '-'
MULT    : '*'
DIV     : '/'
```

And to the expr i added the following expressions:

```
expr
  : e1=expr op=(MULT | DIV) e2=expr     # multiplication
  | e1=expr op=(PLUS | MINUS) e2=expr   # addition
  ;
```

Multiplication is important to have before addition in the grammar file, because we need to do the operations in the right order.

The following command wil create the following parse tree:

```
1+2*3;
```

start

command <EOF>

expr ;

expr + expr

1 expr * expr

2 3