## **COMP 141: Lexics and CFGs**

*Instructions:* In this exercise, we are going to review scanners.

## 1 Toy scanner

- 1. Write a simple program in C++ that receives **a single token** as input and checks
  - if the received token is a positive integer number
  - if the received token is a punctuation character: +,  $\star$ , (, ).

You must use **regular expressions** in contrast to the example in lecture, and check if the input matches the token definitions above.

The output of the program may look like the following:

```
$ ./main
716235
number
$ ./main
(
punc
$ ./main
*
punc
```