

CFG_parser.py output

```
ethankoran@ethans-mbp theory_extra_credit % python3 CFG_parser.py
(+ (- 1 2) (* 3 4))
11
(+ (* 2 3) 4)
10
(* (+ 4 5) (- 6 3))
27
```

Pumping_lemma_tester.py output

```
ethankoran@ethans-mbp theory_extra_credit % python3 pumping_lemma_tester.py
Pumping Lemma Checker for Regular Languages
Enter a regular expression to describe the language: ab*
Enter a string to test: abbbb
Enter the pumping length (p): 2
String satisfies pumping for split: x='a', y='b', z='bbb'
The string 'abbbb' can be pumped. Split into: x='a', y='b', z='bbb'
```

```
ethankoran@ethans-mbp theory_extra_credit % python3 pumping_lemma_tester.py
Pumping Lemma Checker for Regular Languages
Enter a regular expression to describe the language: (0|1)*01
Enter a string to test: 000101
Enter the pumping length (p): 4
String satisfies pumping for split: x='', y='0', z='00101'
The string '000101' can be pumped. Split into: x='', y='0', z='00101'
```