

Matcher Problems (1st set)

All of the following functions should be implemented using matcher methods.

1. Write match methods that take a (flat) list as an argument and returns a count of the number of times the symbol 'spam' occurs.

2. Write match methods that take a list of numbers and symbols as an argument and returns a count of the number of symbols that occur. Hint: check "symbolp".

3. Write matcher methods to calculate the sum of all numbers in a list of numbers and other data.

4. Write match methods to take a list of numbers as an argument & returns a count of the number of odd numbers and the number of even numbers. Return them in a cons-pair.

```
(odd-fn '(5 2 7 4 1)) => (3 . 2)
```

5. Write a version of replace using the matcher. NB: check out the *delete* example, you will (probably) want a helper function for replace.