

1. Find the last but one element of a list.

```
λ> myLast [1,2,3,4]
4
λ> myLast ['x','y','z']
'z'
```

2. Reverse a list.

```
λ> myReverse "A man, a plan, a canal, panama!"
"!amanap ,lanac a ,nalp a ,nam A"
λ> myReverse [1,2,3,4]
[4,3,2,1]
```

3. Find out whether a list is a palindrome.

```
λ> isPalindrome [1,2,3]
False
λ> isPalindrome "madamimadam"
True
λ> isPalindrome [1,2,4,8,16,8,4,2,1]
True
```

4. Eliminate consecutive duplicates of list elements.

```
λ> compress "aaaabccaadeeee"
"abcade"
```

5. Duplicate the elements of a list.

```
λ> dupli [1, 2, 3]
[1,1,2,2,3,3]
```

6. Rotate a list N places to the left.

```
λ> rotate ['a','b','c','d','e','f','g','h'] 3
"defghabc"
λ> rotate ['a','b','c','d','e','f','g','h'] (-2)
"ghabcdef"
```

7. Insert an element at a given position into a list.

```
λ> insertAt 'x' "abcd" 2  
"aXbcd"
```

8. Generate the combinations of K distinct objects chosen from the N elements of a list.

```
λ> combinations 3 "abcdef"  
["abc", "abd", "abe", ...]
```

9. Determine whether a given integer number is prime.

```
λ> isPrime 7  
True
```