Recursion Practice Problems

1) Given a string (text), report the string with the characters in the reversed order (write this recursively)

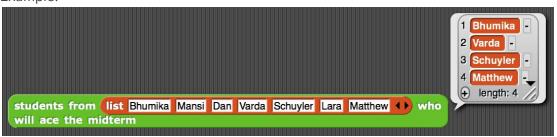
Example:



2. Given a list of students, report a new list containing the students who will ace the midterm (write this recursively). Assumption: a student will ace the midterm if and only if the student attended the review session. You are given the following helper block:



Example:



Solutions

1)

```
+ reverse + word +

if length of word = 0

report word

else

report

join reverse all but first letter of word letter 1 of word 1)
```

2)

```
+students + from + student list : + who + will + ace + the + midterm + (recursion) +

if empty? student list

report list

else

if item 1 of student list attended review session

report

item 1 of student list in front of

students from all but first of student list who will ace the midterm (recursion)

else

report

students from all but first of student list who will ace the midterm (recursion)
```