Pager Printout

Program Name: pager.java   Input File: pager.in

Text pagers need to deliver short messages and have a limited number of characters available on their display. They can deliver messages longer than the display width by scrolling the message from left to right.

Write a program that will show the display of the pager during each step of scrolling a given message on a display of the specified width.

Input
The first line of input will contain a single integer *n* indicating the number of data sets to process. The remainder of the input consists of those *n* data sets.

Each data set will consist of a single line that consists of a positive integer <=20 followed by a quoted string. The integer specifies the width of a pager's display (in characters) and the string inside the quotes is the message to be displayed.

Output
For each data set in the input display the following:
1. A single line, "Data Set #X" where X is 1 for the first data set, 2 for the second, etc.
2. One line for the starting display value and one additional line showing the display for each character shift necessary until the last character of the message is displayed. Each display string should be surrounded by double quotes and padded at the right with spaces, if necessary, to fill the width of the display.

Example Input File
```
3
5 "Hello World!"
20 "I like steak."
1 "blue"
```
Example Output To Screen
```
Data Set #1
"Hello"
"ello "
"llo W"
"lo Wo"
"o Wor"
" Worl"
"World"
"orld!"
Data Set #2
"I like steak.        "
Data Set #3
"b"
"l"
"u"
"e"
```