listIsOrdered

Your task is to write a function, listIsOrdered, that determines whether a linked list is sorted in either ascending or descending order. It should return true if the list is sorted in ascending or descending order, and false otherwise. Your function should **not** modify the list. An empty list is considered to be sorted.

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The Files

list.c	Contains the implementation of basic list functions
list.h	Contains the definition of the list data structure and function prototypes
testListIsOrdered.c	Contains the main function, which reads in a list from standard input, calls listIsOrdered, and prints out the result.
listIsOrdered.c	Contains listIsOrdered, the function you must implement
Makefile	A makefile to compile your code
tests/	A directory containing the inputs and expected outputs for some basic tests
autotest	A script that uses the tests in the tests directory to autotest your solution. You should only run this after you have tested your solution manually.

Examples

Your program should behave like these examples:

```
$ ./testListIsOrdered
Enter list: 2 4 5 5 8 9
listIsOrdered returned TRUE
```

```
$ ./testListIsOrdered
Enter list: 2 4 7 5 4
listIsOrdered returned FALSE
```

```
$ ./testListIsOrdered
Enter list: 9 8 7 2
listIsOrdered returned TRUE
```

```
$ ./testListIsOrdered
Enter list:
listIsOrdered returned TRUE
```

Testing

You can test your program manually by compiling your code using `make`, and then running `./testListIsOrdered`, as shown above. After you are satisfied with your solution, you can autotest it by running `./autotest`. This will run some basic tests on your program, as well as check for memory leaks/errors.