List Print

> This is a **warmup** exercise. It is **not compulsory**, and may be completed **individually or with your lab partner**.

For this activity, you will be looking at a linked list.

Download `list.h`, or copy it into your current directory on a CSE system by running

```
$ cp /web/cs1511/17s2/week11/files/list.h .
```

Make sure you understand the `list` and `node` data structures before beginning this task.

Create a file called `listPrint.c` that includes the `list.h` header file. In it, you should implement `listPrint`, a function which takes a linked list, and prints it to standard output. It should have this prototype:

```
void listPrint (List l);
```

It should print out the list in this format, where X indicates the `NULL` pointer at the end of the list:

```
1 -> 2 -> 3 -> 4 -> X
```

Don't forget to print a new line character!

You should write your own tests in a separate file; `listPrint.c` should *not* contain a `main`. You'll need to think about how to test a function's side effects: remember that printing to standard output is a side-effect.

To run some simple automated tests:

```
$ 1511 autotest listPrint
```

To run Styl-o-matic:

```
$ 1511 stylomatic listPrint.c
Looks good!
```

You'll get advice if you need to make changes to your code.

Submit your work with the *give* command, like so:

```
$ give cs1511 wk11_listPrint
```

Or, if you are working from home, upload the relevant file(s) to the `wk11_listPrint` activity on Give Online.