List Get Nth

> 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 `listGetNth.c` that includes the `list.h` header file. In it, you should implement `listGetNth`, a function which takes a linked list and returns the value of the `n` th item in the list, counting from zero as with arrays. It should assume that `n` will be less than the number of nodes in the list. It should have this prototype:

```
int listGetNth (List l, int n);
```

You should write your own tests in a separate file; `listGetNth.c` should *not* contain a `main`.

To run some simple automated tests:

```
$ 1511 autotest listGetNth
```

To run Styl-o-matic:

```
$ 1511 stylomatic listGetNth.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_listGetNth
```

Or, if you are working from home, upload the relevant file(s) to the `wk11_listGetNth` activity on Give Online.