

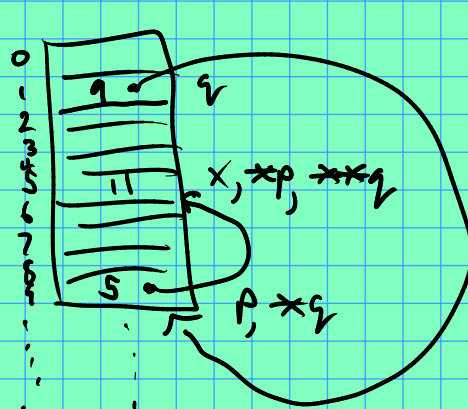
pointers (Not scary!!!)

Q: What's a pointer?

A: A variable that stores a memory address.

```
int x;  
x = 11;  
int* p = &x;
```

↑
where does x live?



```
cout << p << "\n"; // prints 5.
```

```
cout << &p << "\n"; // prints 9.
```

```
int** q = &p;
```

How to "use" them?

↗ Note: $*p$ is the value at memory address p.

↗ So in the above, $*p$ is x

```
cout << x ; // prints 11
```

```
cout << *p ; // prints 11
```

```
*p = 23;
```

```
cout << x ; // prints 23
```

↗ *p = &p ?? (int)(&p)

↑
type int

↑
type int***