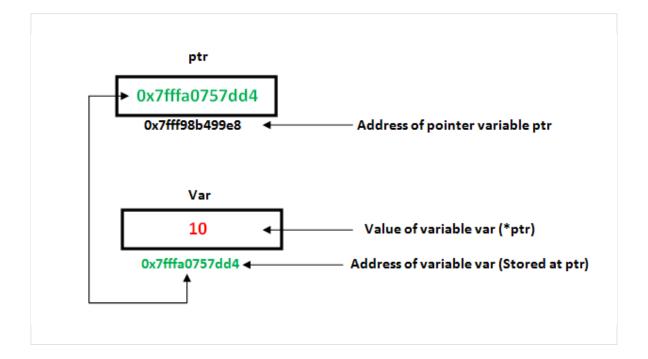
## Motivation for pointers!

- Functions (including main()) don't share space!
- Imagine you have a vector of information. It would be inefficient for you computer to make a copy of all of the data if you aren't going to change any of it.
- PURPOSE OF POINTERS: gives you (the programmer) a way to tell your computer that you have created something and want it to use that exact thing
  - IF you don't tell the computer where your structure/info is, then it will either have to create a copy of it or not be able to find it.



- An "accurate" but very specific depiction of how pointers work
- Student's don't need to understand the addresses ... just understand that they exist ... similar to physical addresses

## USING POINTERS IN C

```
How pointer works in C

int var = 10;

int *ptr = &var;

*ptr = 20;

int **ptr = &ptr;

**ptr = 30;
```