

Midterm

C#

- Variables / data types
- If statements
- Loops
- Functions — with arguments
 - pass by value
 - pass by reference
- Structs, Classes (minor)
 - ↳ hash
 - ↳ array

```
struct address
{
    char street [41];
    char city [16];
    char state [3];
    char zip [11];
}

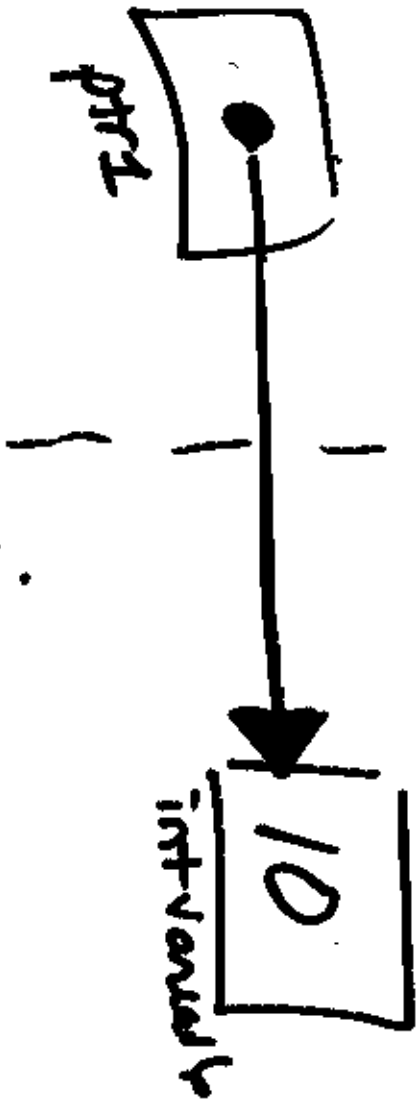
struct employment
{
    char location [21];
    int length;
    float wage;
    emp_address emp_address;
}

}
```

Topic 3

Slides 68-73
Review of Jones

`int *ptr = 8 variable` ← definition



Pointer diagram

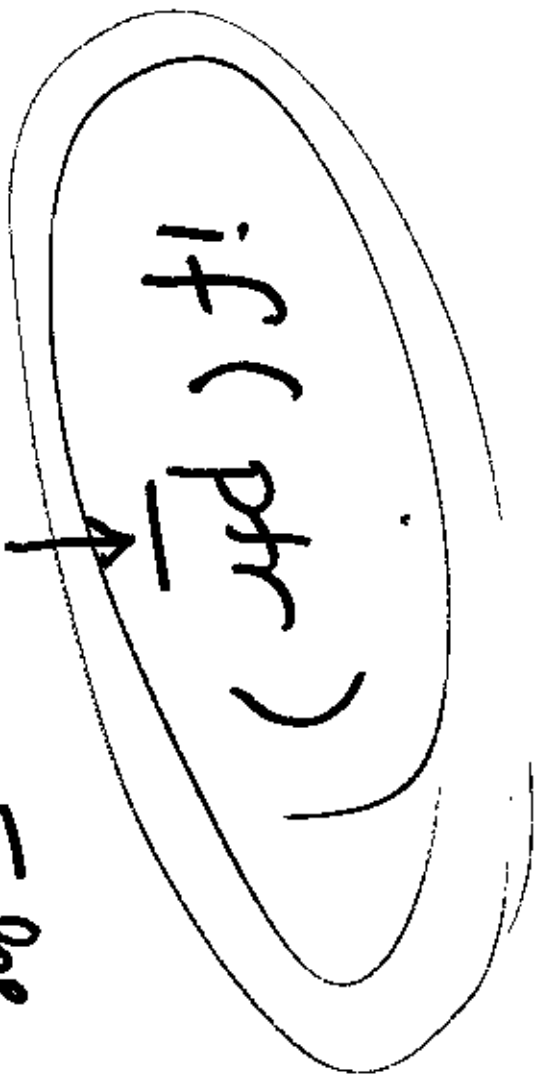
`*ptr = 10;`

Dereferencing

`int * ptr1 = new int;`
address



`int * ptr1;`
`ptr1 = new int;`

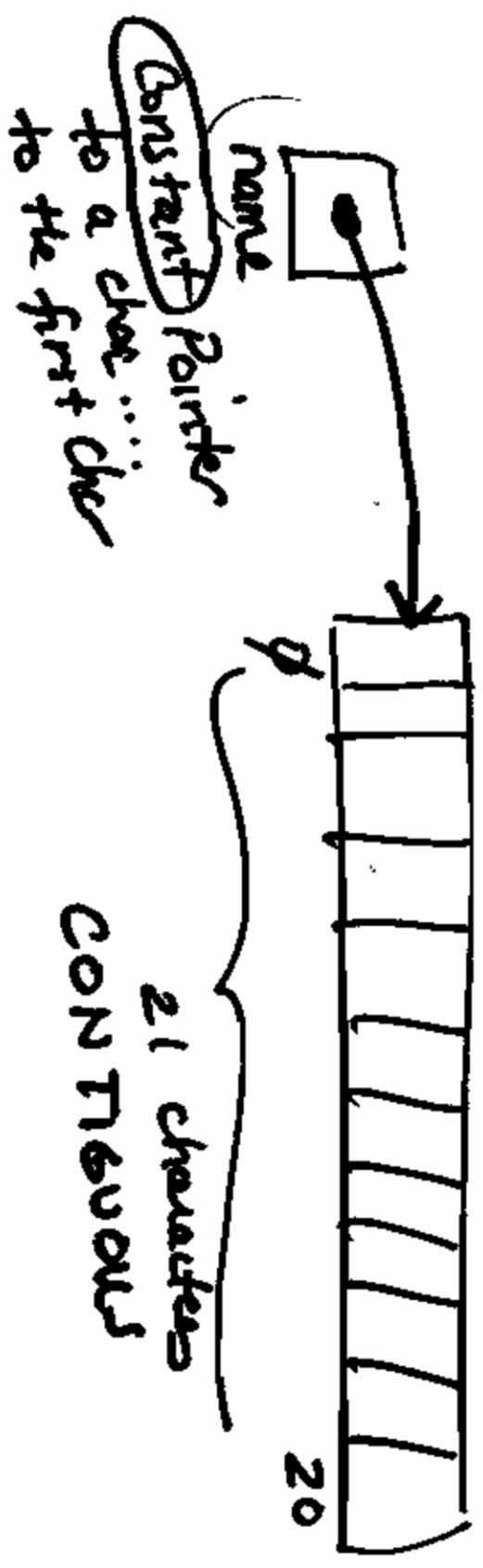


G++

NULL ϕ \leftarrow False

not zero \leftarrow True

char name [21];



char * array; // 1 address
array = new char [size];

