

ELF: ~~executable~~ executable & linking format

readelf --segments < >
--sections < >

N → Pointer (*)
HEAP (&)

type
↓
int * ptr
address of operator

(address of an int)

Email instructor to find where you lost points on lab 01

- min 6 test cases in script file
- code as if user is an idiot [Lab 02 check value of n]
- repeated everything in Lab 01 email

Pointers:

```
int number;  
int *ptr; // same as int* ptr and int * ptr  
ptr = &number;  
*ptr = 5; address of de-referencing operator
```

Pointer

```
int *ptr = &number  
*ptr = 5  
ptr++ [next address]  
[should initialize]
```

Reference Vars - used for overloaded functions

```
int &rVar = number;  
rVar = 5 [implicit dereferencing]  
[cannot access directly]  
[must initialize]
```

Profiling, Code Coverage, memory leaks

↑
time check each f



Header Formatting

int square(int) → prototype

int main() {
 int res = square(5) → actual param
}

int square(int num) {
 ~~return num * num;~~ → formal param
 return num * num;
}

prototype

Call by Value

int square(int)

↓

call

square(num)

Function copies num
into new address to
be used in function

return
statement

num *= num

Pointer

Call by Ref

void square(int *)

↓

square(&num)

same
address

*num *= *num

Ref Value

Call by Ref

void square(int &)

↓

square(num)

same address
"safer" than pointer

num *= num

Figure out how "const" work with above