



# Sets and Arrays

## Project 2



# Sorted Array (2nd week)

- static int search(SET \*sp, char \*elt, bool \*found)
  - Why the boolean pointer?
  - Pass by reference:
    - bool \*found;  
Ind = search(sp, elt, found);  
(what's missing?)
    - bool found;  
Ind = search(sp, elt, &found);
  - Dereference inside search: Alter value found pointer points to
    - \*found = true
    - No need to return found but still return the index



# Sorted Array (2nd week)

- addElement:
  - Which first? Shift or insert?
  - Shift backward or forward?
- removeElement:
  - Which first? Shift or delete?
  - Shift backward or forward?
- findElement:
  - Ternary operator (not required): a shorthand “if...else...”.  
found ? sp→data[locn] : NULL;



# Testing Commands

- Compile:

```
gcc -o unique_sorted unique.c sorted.c
```

```
gcc -o parity_sorted parity.c sorted.c
```

- Execute (always try to debug by yourself first):

(1) Testing addElement:

```
./unique_sorted /scratch/coen12/Macbeth.txt
```

(2) Testing removeElement if (1) works:

```
./unique_sorted /scratch/coen12/Macbeth.txt /scratch/coen12/Bible.txt
```

(3) Testing getElements if (1) & (2) works:

```
./unique_sorted -l /scratch/coen12/Macbeth.txt /scratch/coen12/Bible.txt
```

(4) Testing findElement if (1) & (2) works:

```
./parity_sorted /scratch/coen12/Macbeth.txt
```



# Notes

- Due: Sunday midnight
- Late submission deadline: Monday midnight (-1 point every 14.4 mins)
- Submit a tar file:
  - Command: `tar cvf YOUR_FILE_NAME.tar YOUR_FOLDER`  
Example: `tar cvf project2.tar project2`
  - Double check after uploading