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, Jan 29th at 11:59 pm

- Late submission deadline: Monday, Jan 30th at 11:59 pm (-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