**Sample File**

Hockey Golf

Football Basketball

Football

Baseball Shotput Football

This example is provided to assist you in understanding the drawings requirement in Project 1 as well as to provide a template by which you can easily organize your work.

You may **NOT** use the provided sample data file for this assignment.

Any submission using this data file will receive a grade of 0 for the entire project.

**WordRec Blueprint**

|  |  |
| --- | --- |
| token | string |
| count | int |

**Final Result of Processing the Data**: Filled Five element Array

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 |  | wordCount |
| Baseball | Basketball | Football | Golf | Hockey |  | 5 |
| 1 | 1 | 3 | 1 | 1 |  |

\*Note, Alphabetical

**Array, Initially**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 |  | wordCount |
|  |  |  |  |  |  | 0 |
|  |  |  |  |  |  |

**Filling the Array**

*Hockey* is read in first. Search returns 0, equals wordCount. This is Case 1.

Place *Hockey* (count=1) at end of array, in index wordcount, and increment wordCount

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 |  | wordcount |
| Hockey |  |  |  |  |  | ~~0~~ 1 |
| 1 |  |  |  |  |  |

Next token is *Golf.* Search returns 0, and *Golf* != *Hockey*. This is Case 3.

 Everything to the right of Index 0 must be moved over (working right to left) to make room for *Golf*

Move *Hockey* to clear Index 0; Place *Golf* in index 0 and increment wordCount

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 |  | Wordcount |
| Golf | Hockey |  |  |  |  | ~~1~~ 2 |
| 1 | 1 |  |  |  |  |