

AP Computer Science Review



is Based on the Topic of

Sorting

Sorting refers to how information is placed. Insertion sort is the sorting of the portion of an array as the next element is accessed. An excerpt may be shown here.

```
for (int i = 0; i < 7; i++) {  
    if (arr[i] > arr[i+1]) {  
        /* a swap is made; the list is ordered up to that point */  
    } else {  
        /* nothing is done */  
    }  
}
```

A librarian would like to organize a digital book collection. The title of each book can be found here.

`["Winter", "Autumn", "Summer", "North", "East", "Temperature", "Climate"];`

Each letter is represented by a number. A represents 1, B represents 2, and C represents 3. The pattern can be recognized until reaching 26. The librarian would like to order from least to greatest using the first letter of each word.

The task is to write out the list after implementing the **third** ordering of insertion sort

The first ordering may be written as such. After the seventh ordering, the task is finished.

`["Autumn", "Winter", "Summer", "North", "East", "Temperature", "Climate"];`