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CSC 230
Project 4 Pseudocode
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algorithm manageData is

```
    input: starting character from file,  
           SSN from file,  
           name from file  
    output: insertion count, deletion count, retrieval count, number of entries in list,  
           elapsed time  
    if starting character is equal to i (for insert)  
        call HashTable insert function;  
        in HashTable insert function call SLL search function using hashing index;  
        if search functions returns nullptr (SSN does not exist in HashTable)  
            call SLL insert function using hashing index;  
            return true;  
            increment insertion count; (in main function)  
        else (SSN exists in HashTable)  
            return false;  
    if starting character is equal to d (for delete)  
        call HashTable erase function;  
        in HashTable erase function call SLL remove function using hashing index;  
        if remove function returns true (SSN was removed)  
            return true;  
            increment deletion count; (in main function)  
        else (SSN was not removed)  
            return false;  
    if starting character is equal to r (for retrieval)  
        call HashTable find function;  
        in HashTable find function call SLL search function using hashing index;  
        if search function does not return nullptr (item exists in HashTable)  
            return true;  
            increment retrieval count; (in main function)  
        else (item does not exist in HashTable)  
            return false;
```