Write blocks of code to perform the functions used in the following main program. Your blocks and title lines must match the function called in the main function. Each block should be a short function of only a few lines. [60 pts]

```cpp
int main() {
    string s = "HELLO", t = "GoodBye!";
    // (a) Tests whether a string omits the letter E, return true or false
    cout << hasNoE(s) << endl; //prints: 0 -because HELLO HAS E
    // (b) Return the last character
    cout << last(t) << endl; //prints: !
    // (c) Insert a space (" ") to a specified position of variable t
    insertSpace(t, 4); cout << t << endl; //prints: Good Bye!
    // (d) Returns parameter string with first letter removed
    cout << removeFirst(s) << endl; //prints: ELLO
    return 0;
}
```

Answer:(a) bool hasNoE(string st) {
    return st.find("E") == -1;
}

Answer:(b) char last(string st) {
    return st[st.size()-1];
}

Answer:(c) void insertSpace(string &st, int index) {
    st.insert(index, " ");
}

Answer:(d) string removeFirst(string st) {
    return st.substr(1);
}
Write the output of the following program. Assume it’s compile to a.out and executed with the command ./a.out abc 123

```c
int main(int argc, char** argv) {
    string words[3] = {“An”, “easy”, “question”};
    for (int i = 0; i < 2; i++) cout << words[i]; cout << endl; //line a
    cout << words[0][0] << endl; //line b
    string s = argv[1];
    cout << argc << s << endl; //line c
    cout << s.substr(0,2) << endl; //line d
    cout << s[--argc] << endl; //line e
    cout << s[2]++ + 1 << endl; //line f
    cout << ++argv[2][2] << endl; //line g
    cout << argc << s << endl; //line h
    return 0;
}
```

Note: ascii value of ‘a’ is 97

What is the output at line a: An easy [5 pts]
What is the output at line b: A [5 pts]
What is the output at line c: 3abc [5 pts]
What is the output at line d: ab [5 pts]
What is the output at line e: c [5 pts]
What is the output at line f: 100 [5 pts]
What is the output at line g: 4 [5 pts]
What is the output at line h: 2abd [5 pts]