CS31 project4 report

1. The notable obstacles I encountered In this project was the Moving to the front functions as I didn’t expect to create many copies of items In the for loop. Also, the remove Dups function, makemerge function, and divide function are extremely tricky for me which each took nearly an hour for me to compile without creating new array.

2.string h[7] = { "neil", "sonia", "john", "amy", "", "elena", "john" };

assert(enumerate(h, 7, "john") == 2);

assert(findMatch(h, 7, "john") == 2);

**int** bg;

**int** en;

assert(findRun(h, 7, "", bg, en) && bg == 4 && en == 4);

assert(findRun(h, 7, "john", bg, en) && bg == 2 && en == 2);

string g[4] = { "neil", "sonia", "amy", "elena" };

assert(findMin(g, 4) == 2);

assert(moveToEnd(g, 4, 1) == 1 && g[1] == "amy" && g[3] == "sonia");

assert(findDifference(h, 7, g, 3) == 2);

assert(findDifference(h, 4, g, 4) == 2);

string people[5] = { "john", "sonia", "samuel", "elena", "neil" };

assert(findMin(people, 5) == 3);

assert(moveToBeginning(people, 5, 2) == 2 && people[0] == "samuel" && people[2] == "sonia");

string f[4] = { "elena", "amy", "sonia", "john" };

assert(moveToBeginning(f, 4, 2) == 2 && f[0] == "sonia" && f[2] == "amy");

string e[5] = { "elena", "elena", "elena", "sonia", "sonia" };

assert(removeDups(e, 5) == 2 && e[1] == "sonia");

string x[4] = { "john", "john", "samuel", "sonia" };

string y[4] = { "amy", "elena", "john", "ketanji" };

string z[10];

assert(makeMerger(x, 4, y, 4, z, 10) == 8 && z[5] == "ketanji");

string sc[6] = { "john", "amy", "samuel", "elena", "sonia", "neil" };

string sc2[4] = { "john", "sonia", "amy", "neil" };

cout << "All tests succeeded" << endl;

All The test cases above are used to test the correctness of my functions and most of them are from the project4 spec.

assert(divide(h, 7, "john") == 3); //This didn’t work as I expect. The reason is probably some mistakes I made in my code.

string sc[6] = { "john", "amy", "samuel", "elena", "sonia", "neil" };

assert( divide(sc, 6, "ketanji")==3); // This didn’t pass either.