## **FAILED**

```
savePayload()
AKA testEnqueue
```

```
] ____.c lests.cpp
            .c AdjMat.cpp
                         [c] Production.cpp [c] LinkedList.cpp ⊠
    52 }
    53@ void LinkedList::savePayload(LLNode* lp, Payload* mp)
    54 {
    55⊖// //if the list is empty, then make payP be mp
    56 // //else traverse the list,
    57 // //make a new list element
    58 // //put mp in that
    59 // //attach the new list element to the existing list
    60 // if(isEmpty(lp))
    61 // {
    62 //
                lp \rightarrow payP = mp;
    63 // }
    64 // else
    65 // {
    66 //
                LLNode* temp = lp;
    67 //
                while(temp->next)
    68 //
                     temp=(LLNode*)temp->next;
    69 //
    70 //
    71 //
                //now temp points to the last element
    72 //
    73 //
                //make a new element, attach mp to it, wire up the new element
    74 //
                LLNode* newList = makeEmptyLinkedList();
    75 //
                newList->payP = mp;
    76 //
                temp->next = (struct LLNode*)newList;
    77 //
                newList->prev = (struct LLNode*) temp;
    78 // }
    79 }
    80 void LinkedList::savePayload2(LLNode2* lp, Payload2* mp)
  🛃 Problems 🔊 Tasks 📮 Console 🛭 🗏 Properties 🔅 Debug
  <terminated> (exit value: 0) SystemsHW4 Debug [C/C++ Application] C:\Users\jake1\OneDrive\Desktop\Algorithms 2223\SystemsHW4\Debug\Syste
  test make LList did pass
  testEnqueue did not pass.
  Printing history
```

```
init() Adjmat
                      17⊖ void AdjMat::init()
                       18 {
                      199 // int ncols = n;
                      20 // printf("In init with ncols = %d\n", ncols);
                      21 // //TODO need to malloc for the edges
                       22 // //(type*) name = (type*)malloc(sizeof(type))
                      23 // edgesP = (int*)malloc(sizeof(int) * ncols * ncols);
                      24 //
                      25 // for(int row = 0; row<ncols; row++)
                       26 // {
                                  for(int col = 0; col<ncols; col++)</pre>
                      27 //
                       28 //
                                       *((edgesP)+(row*ncols)+col)= 0;
                      29 //
                       30 //
                       31 //
                      32 // }
                      33 }
                      34
                      🔐 Problems 🔎 Tasks 📮 Console 🛭 🔲 Properties 🔅 Debug
                      <terminated> (exit value: -1,073,741,819) SystemsHW4 Debug [C/C++ Application] C:\Users\jake1\OneDrive\Desktop\Algorithms 2223\Systems
                      in column 0, read 1
                      in column 1, read 1
                      in column 2, read 1
                      in column 3, read 0
                      in column 4, read 1
                      in column 5, read 0
                      in column 6, read 0
```

```
testmakeLinkedList

¾ 35⊖ LLNode* LinkedList::makeEmptyLinkedList()

()
                             36 {
                             37⊕// LLNode* lp = (LLNode*) malloc(sizeof(LLNode));
                             38 // lp->next = (struct LLNode*)0;
                             39 // lp->prev = (struct LLNode*)0;
                             40 // lp \rightarrow payP = (Payload*)0;
                            41 //
                            42 // return lp;
                          43 }
                            449 LLNode2* LinkedList::makeEmptyLinkedList2()
                            45 {
                            46
                                    LLNode2* lp = (LLNode2*) malloc(sizeof(LLNode2));
                             47
                                    lp->next = (struct LLNode2*)0;
                                    lp->prev = (struct LLNode2*)0;
                             48
                            49
                                    lp->payP = (Payload2*)0;
                             50
                             51
                                    return lp;
                             52 }
                             53@void LinkedList::savePayload(LLNode* lp, Payload* mp)
                             54 {
                                    //if the list is empty, then make payP be mp
                             55
                                    //else traverse the list,
                             56
                             57
                                    //make a new list element
                             58
                                    //put mp in that
                                    //attach the new list element to the existing list
                             59
                             60
                                    if(isEmpty(lp))
                             61
                                    {
                                         ln-snavD - mn.
                           🔐 Problems 🔎 Tasks 📮 Console 🛭 🗏 Properties 🐞 Debug
                          <terminated> (exit value: -1) SystemsHW4 Debug [C/C++ Application] C:\Users\jake1\OneDrive\Desktop\Algorithms 2223\SystemsHW4\Debug\Syste
                          2.300000
                          8.900000
                          3.200000
                          21.000000
                          6.800000
                          testReadfile did pass
                          starting testMakeLList
```

```
printHistory()
                              168@ void LinkedList::printHistory(LLNode2* hp)
                              169 {
                              170⊖// std::ofstream outfile("output.txt");
                              171 //
                                         puts("Printing history");
                                          if(hp->payP ==(Payload2*)0)
                              172 //
                              173 //
                              174 //
                                               puts("Empty list");
                              175 //
                                               outfile<<"The list is empty.";</pre>
                                               outfile.close();
                              176 //
                              177 //
                                         }
                              178 //
                                         else
                              179 //
                                         {
                              180 //
                                            //traverse the list, printing as we go
                              181 //
                                             float treasureSubtotal = 0.0;
                              182 //
                                             int room = -1;
                              183 //
                                              LLNode2* temp = hp;
                              184 //
                                              int roomsSearched=0;
                              185 //
                                              while(temp->next)
                              186 //
                              187 //
                                                  room =temp->payP->roomNumber;
                              188 //
                                                  treasureSubtotal+= temp->payP->treasure;
                                                  outfile<<"The room number is " << room << " and the treasure subtotal is</pre>
                              189 //
                              190 //
                                                  printf("The room was %d, and the treasure subtotal was %f.\n", room, trea
                              191 //
                                                  temp=(LLNode2*)temp->next;
                              192 //
                                                  roomsSearched++;
                              193 //
                              404 11
                             🔐 Problems 🧔 Tasks 📮 Console 🛭 🔲 Properties 🔅 Debug
                             <terminated> (exit value: 0) SystemsHW4 Debug [C/C++ Application] C:\Users\jake1\OneDrive\Desktop\Algorithms 2223\SystemsHW4\Debug\SystemsHW4.exe (9/22/21, 11:4
                             testEnqueue did pass
                             Do the calls look right? (y/n):n
                             testprintHistory did not pass
                             Starting Production
```

```
savePayload()
                          52 }
                          53 void LinkedList::savePayload(LLNode* lp, Payload* mp)
                          54 {
                                  //if the list is empty, then make payP be mp
                          55
                          56
                                  //else traverse the list,
                          57
                                  //make a new list element
                          58
                                  //put mp in that
                                  //attach the new list element to the existing list
                          59
                          60
                                  if(isEmpty(lp))
                          61
                                  {
                                       1p \rightarrow payP = mp;
                          62
                          63
                                  }
                                  else
                          64
                          65
                                  {
                                       LLNode* temp = lp;
                          66
                                       while(temp->next)
                          67
                          68
                                           temp=(LLNode*)temp->next;
                          69
                           70
                                       //now temp points to the last element
                          71
                          72
                          73
                                       //make a new element, attach mp to it, wire up the new element
                           74
                                       LLNode* newList = makeEmptyLinkedList();
                           75
                                       newList->payP = mp;
                          76
                                       temp->next = (struct LLNode*)newList;
                          77
                                       newList->prev = (struct LLNode*) temp;
                          78
                          79 }
                          80 void LinkedList::savePayload2(LLNode2* lp, Payload2* mp)
                        🔐 Problems 🔎 Tasks 📮 Console 🛭 🔲 Properties 🔅 Debug
                        <terminated> (exit value: 0) SystemsHW4 Debug [C/C++ Application] C:\Users\jake1\OneDrive\Desktop\Algorithms 2223\SystemsHW4\Debug\SystemsHW4
                        starting testMakeLList
                        test make LList did pass
                        testEnqueue did pass
```

```
init()
                          17⊖ void AdjMat::init()
                          18 {
                          19
                                  int ncols = n;
                          20
                                  printf("In init with ncols = %d\n", ncols);
                         21
                                  //TODO need to malloc for the edges
                          22
                                  //(type*) name = (type*)malloc(sizeof(type))
                         23
                                  edgesP = (int*)malloc(sizeof(int) * ncols * ncols);
                          24
                          25
                                  for(int row = 0; row<ncols; row++)</pre>
                          26
                                       for(int col = 0; col<ncols; col++)</pre>
                          27
                          28
                          29
                                           *((edgesP)+(row*ncols)+col)= 0;
                          30
                          31
                                      }
                          32
                                  }
                          33 }
                          34
                          35@ void AdjMat::setEdge(int row, int col)
                          36 {
                          37
                          38
                                  int ncols = n;
                                  int* arrayBeginning = edgesP;
                          39
                         🔐 Problems 🔊 Tasks 📮 Console 🛭 🗏 Properties 🔅 Debug
                         <terminated> (exit value: 0) SystemsHW4 Debug [C/C++ Application] C:\Users\jake1\OneDrive\Desktop\Algorithms 2223\SystemsHW4\Debug\SystemsH"
                         The treasure in room 6 is 21.000000
                         The treasure in room 7 is 6.800000
                         test got adjacency matrix pass
                         starting testMakellist
```

```
testMakeLinkedList
                            34
                            35@LLNode* LinkedList::makeEmptyLinkedList()
()
                            36 {
                                    LLNode* lp = (LLNode*) malloc(sizeof(LLNode));
                            37
                                    lp->next = (struct LLNode*)0;
                            38
                            39
                                    lp->prev = (struct LLNode*)0;
                            40
                                    lp->payP = (Payload*)0;
                            41
                                    return lp;
                            42
                            43 }
                            449 LLNode2* LinkedList::makeEmptyLinkedList2()
                            45 {
                            46
                                    LLNode2* lp = (LLNode2*) malloc(sizeof(LLNode2));
                                    lp->next = (struct LLNode2*)0;
                            47
                            48
                                    lp->prev = (struct LLNode2*)0;
                            49
                                    lp \rightarrow payP = (Payload2*)0;
                            50
                            51
                                    return lp;
                            52 }
                            53@void LinkedList::savePayload(LLNode* lp, Payload* mp)
                                    //if the list is empty, then make payP be mp
                            55
                            56
                                    //else traverse the list,
                            57
                                    //make a new list element
                                    //put mp in that
                            58
                            59
                                    //attach the new list element to the existing list
                                    if(isEmpty(lp))
                            60
                            61
                                        ln-snavD - mn.
                            62
                          🔐 Problems 🥏 Tasks 📮 Console 🛭 📃 Properties 🔅 Debug
                         <terminated> (exit value: 0) SystemsHW4 Debug [C/C++ Application] C:\Users\jake1\OneDrive\Desktop\Algorithms 2223\SystemsHW4\Debug\System
                          6.800000
                          testReadfile did pass
                          starting testMakeLList
                          test make LList did pass
```

```
printHistory()
                  167 }
                 168@void LinkedList::printHistory(LLNode2* hp)
                  169 {
                           std::ofstream outfile("output.txt");
                  170
                           puts("Printing history");
                  171
                           if(hp->payP ==(Payload2*)0)
                  172
                  173
                  174
                                puts("Empty list");
                                outfile<<"The list is empty.";
                  175
                 176
                                outfile.close();
                  177
                           }
                           else
                  178
                  179
                  180
                               //traverse the list, printing as we go
                 181
                               float treasureSubtotal = 0.0;
                  182
                               int room = -1;
                  183
                               LLNode2* temp = hp;
                  184
                               int roomsSearched=0;
                  185
                               while(temp->next)
                  186
                  187
                                    room =temp->payP->roomNumber;
                                    treasureSubtotal+= temp->payP->treasure;
                  188
                                   outfile<<"The room number is " << room << "
                  189
                                    printf("The room was %d, and the treasure s
                 190
                  191
                                    temp=(LLNode2*)temp->next;
                 192
                                    roomsSearched++;
                  193
                 🦣 Problems 🏿 Tasks 🖳 Console 🛭 📃 Properties 🐞 Debug
                 terminated> (exit value: 0) SystemsHW4 Debug [C/C++ Application] C:\Users\jake1\OneDrive\Desktop\Algorithm
                 Total number of rooms searched was 5
                 Do the calls look right? (y/n):y
                 testprintHistory did pass
```