## **FAILED**

```
savePayload()
                          50⊖ void savePayload(LLNode* lp, Payload* mp)
                          51 {
                         52
                         53 }
                          549 void savePayload2(LLNode2* lp, Payload2* mp)
                       🦹 Problems 🔊 Tasks 📮 Console 🛭 📃 Properties 🧬 Termin
                       <terminated> (exit value: 0) HW3.exe [C/C++ Application] C:\Users\jh:
                       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
                       The treasure in room 0 is 13.100000
                       The treasure in room 1 is 4.600000
                       The treasure in room 2 is 6.400000
                       The treasure in room 3 is 2.300000
                       The treasure in room 4 is 8.900000
                       The treasure in room 5 is 3.200000
                       The treasure in room 6 is 21.000000
                       The treasure in room 7 is 6.800000
                       test got adjacency matrix pass
                       starting testMakeLList
                       test make LList did pass
                       testEnqueue did not pass.
                       testRemove case 1 with 1
```

```
init()
                        11⊖ void init(AdjMat* adjMP)
                        12 {
                        13
                        14 }
                        15
                        16⊖ void setEdge(AdjMat* adjMP, int row, int col)
                        17 {
                        18
                        19
                                int ncols = adjMP->n;
                        20
                                int* arrayBeginning = adjMP->edgesP;
                        21
                                *(arrayBeginning + (ncols*row) +col) = 1;
                        22
                                *(arrayBeginning + (ncols*col) + row) = 1;
                        23 }
                        24⊖ int getEdge(AdjMat* adjMP, int row, int col)
                        25 {
                        26
                                int ncols = adjMP->n;
                        27
                                int* arrayBeginning = adjMP->edgesP;
                        28
                                return *(arrayBeginning + (ncols*row) +col) ;
                        29 }
                        30
                        31@ void display(AdjMat* adjMP)
                        32 {
                        33
                                int ncols = adjMP->n;
                                printf("In init with ncols = %d\n", ncols);
                        34
                        35
                                for(int row = 0; row<ncols; row++)</pre>
                        36
                        37
                                    for(int col = 0; col<ncols; col++)</pre>
                        38
                        39
                                        int x = *((adjMP->edgesP)+(row*ncols)+col);
                        40
                                        printf("%d", x);
                        41
                                    printf("\n");
                        42
                        43
                                }
                        44
                        45 }
                        46
                       🥐 Problems 🔎 Tasks 📮 Console 🛭 🛅 Properties 🧢 Terminal
                      <terminated> (exit value: 0) HW3.exe [C/C++ Application] C:\Users\jhsu0\eclipse-works
                       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
                       The treasure in room 0 is 13.100000
                       The treasure in room 1 is 4.600000
                       The treasure in room 2 is 6.400000
                       The treasure in room 3 is 2.300000
                       The treasure in room 4 is 8.900000
                       The treasure in room 5 is 3.200000
                       The treasure in room 6 is 21.000000
                       The treasure in room 7 is 6.800000
```

test got adjacency matrix not pass

ctanting tectMakellict

```
testmakeLinkedList
                    320 LLNode* makeEmptyLinkedList()
()
                    33 {
                    34
                            LLNode* lp = (LLNode*) malloc(sizeof(LLNode));
                    35\Theta // lp \rightarrow next = (struct LLNode*)0;
                    36 // lp->prev = (struct LLNode*)0;
                    37 // lp \rightarrow payP = (Payload*)0;
                    38
                            return lp;
                    39 }
                    40
                    41@LLNode2* makeEmptyLinkedList2()
                    42 {
                    43
                            LLNode2* lp = (LLNode2*) malloc(sizeof(LLNode2));
                    44
                            lp->next = (struct LLNode2*)0;
                    45
                            lp->prev = (struct LLNode2*)0;
                    46
                            lp->payP = (Payload2*)0;
                    47
                    48
                            return lp;
                    49 }
                    500 void savePayload(LLNode* lp, Payload* mp)
                    51 {
                    52
                            //if the list is empty, then make payP be mp
                             //else traverse the list
                    53
                  🚹 Problems 🙉 Tasks 📮 Console 🛭 🔪 🗏 Properties 🗱 Debug
                  <terminated > (exit value: -1,073,741,819) tryHW3.exe [C/C++ Application] C:\Users\zac
                  6.400000
                  2.300000
                  8.900000
                  3.200000
                  21.000000
                  6.800000
                  starting testMakeLList
```

```
printHistory()
                         165⊖ void printHistory(LLNode2* hp)
                         166 {
                         167
                         168 }
                         169⊖ LLNode* removeFromList(LLNode* hP, Payload* pP)
                         170 {
                                  LLNode* retHead = hP;//only changes if first elem
                         171
                                  //find the payload
                         172
                                  //use the structure of a list, namely, list is em
                         173
                                  if/icEmpto/hD\\
                        🦹 Problems 🛭 Tasks 📮 Console 🛭 🗏 Properties 🥒 Terminal
                        HW3.exe [C/C++ Application]
                        The treasure in room 0 is 13.100000
                        The treasure in room 1 is 4.600000
                        The treasure in room 2 is 6.400000
                        The treasure in room 3 is 2.300000
                        The treasure in room 4 is 8.900000
                        The treasure in room 5 is 3.200000
                        The treasure in room 6 is 21.000000
                        The treasure in room 7 is 6.800000
                        test got adjacency matrix pass
                        starting testMakeLList
                        test make LList did pass
                        testEnqueue did pass
                        testRemove case 1 with 1
                        testRemove case 2 with 1
                        testRemove case 3 with 1
                        testRemove case 4 with 1
                        testRemove case 5 with 1
                        testRemove case 6 with 1
                        Do the calls look right? (y/n):n
                        testprintHistory did not pass
                        About to run production.
                        Found 1 interesting arguments.
```

## **PASSED**

```
savePayload()
                         50⊖ void savePayload(LLNode* lp, Payload* mp)
                                 //if the list is empty, then make payP be mp.
                         52
                         53
                                 //else traverse the list,
                                 //make a new list element
                         54
                                 //put mp in that
                         55
                                 //attach the new list element to the existing list
                         56
                         57
                                 if(isEmpty(lp))
                         58
                                      lp \rightarrow payP = mp;
                         59
                         60
                                 }
                                 else
                         61
                         62
                         63
                                     LLNode* temp = 1p;
                         64
                                     while(temp->next)
                         65
                                          temp=(LLNode*)temp->next;
                         66
                         67
                                     //now temp points to the last element
                         68
                         69
                                     //make a new element, attach mp to it, wire up
                         70
                         71
                                     LLNode* newList = makeEmptyLinkedList();
                         72
                                     newList->payP = mp;
                         73
                                     temp->next = (struct LLNode*)newList;
                         74
                                     newList->prev = (struct LLNode*) temp;
                         75
                         76 }
                         77@ void savePayload2(LLNode2* lp, Payload2* mp)
                                 //if the list is empty, then make payP be mp
                         79
                                 //else traverse the list,
                         80
                       🦹 Problems 🔎 Tasks 📮 Console 🛭 📋 Properties 🧢 Terminal
                      <terminated> (exit value: 0) HW3.exe [C/C++ Application] C:\Users\jhsu0\eclipse
                       The treasure in room 4 is 8.900000
                       The treasure in room 5 is 3.200000
                       The treasure in room 6 is 21.000000
                       The treasure in room 7 is 6.800000
                       test got adjacency matrix pass
                       starting testMakeLList
                       test make LList did pass
                       testEnqueue did pass
                       testRemove case 1 with 1
                       testRemove case 2 with 1
                       testRemove case 3 with 1
                       testRemove case 4 with 1
                       testRemove case 5 with 1
                       testRemove case 6 with 1
                       testPrintHistory did nass
```

```
init()
                         11⊖ void init(AdjMat* adjMP)
                         12 {
                         13
                                 int ncols = adjMP->n;
                         14
                                 printf("In init with ncols = %d\n", ncols);
                         15
                                 for(int row = 0; row<ncols; row++)</pre>
                         16
                         17
                                     for(int col = 0; col<ncols; col++)</pre>
                         18
                         19
                                         *((adjMP->edgesP)+(row*ncols)+col)= 0;
                         20
                         21
                                 }
                         22
                        23 }
                         24
                         25⊖ void setEdge(AdjMat* adjMP, int row, int col)
                         26 {
                         27
                         28
                                 int ncols = adjMP->n;
                         29
                                 int* arrayBeginning = adjMP->edgesP;
                         30
                                 *(arrayBeginning + (ncols*row) +col) = 1;
                         31
                                 *(arrayBeginning + (ncols*col) + row) = 1;
                         32 }
                         33⊖ int getEdge(AdjMat* adjMP, int row, int col)
                         35
                                 int ncols = adjMP->n;
                         36
                                 int* arrayBeginning = adjMP->edgesP;
                         37
                                 return *(arrayBeginning + (ncols*row) +col);
                         38 }
                         39
                        40⊖ void display(AdjMat* adjMP)
                        41 {
                         42
                                 int ncols = adjMP->n;
                         43
                                 printf("In init with ncols = %d\n", ncols);
                         44
                                 for(int row = 0; row<ncols; row++)</pre>
                        45
                                     for(int col = 0; col<ncols; col++)</pre>
                        47
                                         int x = *((adjMP->edgesP)+(row*ncols)+col);
                        48
                         49
                                         printf("%d", x);
                         50
                         51
                                     printf("\n");
                         52
                                 }
                        🥷 Problems 🔎 Tasks 📮 Console 🛭 📃 Properties 🧢 Terminal
                       <terminated> (exit value: 0) HW3.exe [C/C++ Application] C:\Users\jhsu0\eclipse-v
                       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
                       The treasure in room 0 is 13.100000
                       The treasure in room 1 is 4.600000
                       The treasure in room 2 is 6.400000
                       The treasure in room 3 is 2.300000
                       The treasure in room 4 is 8.900000
                       The treasure in room 5 is 3.200000
                       The treasure in room 6 is 21.000000
                       The treasure in room 7 is 6.800000
```

test got adjacency matrix pass

```
testMakeLinkedList
                           32@LLNode* makeEmptyLinkedList()
()
                           33 {
                                  LLNode* lp = (LLNode*) malloc(sizeof(LLNode));
                           34
                           35
                                  lp->next = (struct LLNode*)0;
                           36
                                  lp->prev = (struct LLNode*)0;
                           37
                                  lp \rightarrow payP = (Payload*)0;
                           38
                                  return lp;
                           39 }
                           40
                         📳 Problems 🔊 Tasks 📮 Console 🛭 🔲 Properties 🗱 Debug
                        <terminated> (exit value: 0) tryHW3.exe [C/C++ Application] C:\Users\zaqis\OneDrive\Desktop\CS 2303\tryHW3\Debug\tryHW3.rounu an euge
                         checking rooms 1 and 1.
                         checking rooms 1 and 2.
                         found an edge
                         checking rooms 1 and 3.
                         checking rooms 1 and 4.
                         found an edge
                         checking rooms 1 and 5.
                         checking rooms 1 and 6.
                         found an edge
                         checking rooms 1 and 7.
                         found an edge
                        Done by queue empty
                        Printing history
                         The room was 0, and the treasure subtotal was 13.100000.
                         The room was 1, and the treasure subtotal was 17.700001.
                         The room was 3, and the treasure subtotal was 20.000000.
                         The room was 5, and the treasure subtotal was 23.200001.
                         The room was 7, and the treasure subtotal was 30.000000.
                         The room was 2, and the treasure subtotal was 36.400002.
                         The room was 4 and the treasure subtotal was 45 300003
```

```
printHistory()
                                   165⊖ void printHistory(LLNode2* hp)
                                   166 {
                                             puts("Printing history");
if(hp->payP ==(Payload2*)0)
                                   167
                                   168
                                   169
                                   170
                                                  puts("Empty list");
                                   171
                                    172
                                   173
                                             {
                                                 //traverse the list, printing as we go
float treasureSubtotal = 0.0;
                                    174
                                   175
                                                int room = -1;
LLNode2* temp = hp;
                                   176
                                   177
                                   178
                                                 while(temp->next)
                                    179
                                   180
                                                     room =temp->payP->roomNumber;
                                    181
                                                     treasureSubtotal+= temp->payP->treasure;
                                   182
                                                     printf("The room was %d, and the treasure subtotal was %f.\n", room, treasureSubtotal);
                                                     temp=(LLNode2*)temp->next;
                                   183
                                   184
                                   185
                                   186
                                                 room =temp->payP->roomNumber;
                                   187
                                                 treasureSubtotal+= temp->payP->treasure;
                                    188
                                                 printf("The room was %d, and the treasure subtotal was %f.\n", room, treasureSubtotal);
                                   190 }
                                   191@ LLNode* removeFromList(LLNode* hP, Payload* pP)
                                  📳 Problems 🕫 Tasks 📮 Console 🛭 📃 Properties 🧬 Terminal
                                  HW3.exe [C/C++ Application]
                                  The treasure in room 0 is 13.100000
                                  The treasure in room 1 is 4.600000
                                  The treasure in room 2 is 6.400000
                                  The treasure in room 3 is 2.300000
                                  The treasure in room 4 is 8.900000
                                  The treasure in room 5 is 3.200000
                                  The treasure in room 6 is 21.000000
                                  The treasure in room 7 is 6.800000
                                  test got adjacency matrix pass
                                  starting testMakeLList
                                  test make LList did pass
                                  testEnqueue did pass
                                  testRemove case 1 with 1
                                  testRemove case 2 with 1
                                  testRemove case 3 with 1
                                  testRemove case 4 with 1
                                  testRemove case 5 with 1
                                  testRemove case 6 with 1
                                  Do the calls look right? (y/n):y
                                  testprintHistory did pass
                                  About to run production.
```