



United International University (UIU)
Dept. of Computer Science & Engineering (CSE)
Assignment-III Year: 2021 Trimester: Spring Program: BSCSE
Course: CSE 2215/CSI 217 Data Structure and Algorithms-I

There are TWO questions. Answer all of them. Please submit assignment by 03/04/2021 Saturday within 11:59pm(night) to lms.

1. Write statements to create a linked list (without using any loop) using all the individual digits of your own STUDENT ID. [5]

For example, STUDENT ID=011202074
Individual digits are 0, 1, 2, 4, 7
Linked List is: 0→1→2→4→7→NULL
Assume starting node is “head”

2. Show diagram for each of the following statements. Assume, [5]
x=LAST_DIGIT_OF_YOUR_STUDENT_ID.

```
super=(node*)malloc(sizeof(node));  
super->next=NULL;  
super->data=x*3;
```

```
temp=(node*)malloc(sizeof(node));  
temp->data=super->data+ x*5;  
temp->next=NULL;
```

```
temp1=(node*)malloc(sizeof(node));  
temp1->data=super->data * temp->data;  
temp1->next=NULL;
```

```
super->next=temp1;  
super->next->next=temp;  
temp1->next->next=super;
```