#### REPORT

### QUESTION NO. 01: (using single linked list)

In this question we were required to find the mid values of the linked list so I have used three pointers curr and runner are initialized as start whereas prev is initialized as null. Prev is initialized as null just to keep track of the previous element that is required in even size case. curr will move one step in iteration while runner will move two steps and prev will be equal to runner once the loop starts, at the end if the runner is null means the size of the linked list is even so we will print two values and if runner->next is null then size is odd and one value will be printed.

#### QUESTION NO. 02: (using single linked list)

In this question we have used the same approach as question 01 the only difference is that in this case, we also need to sort the elements and for that I have used bubble sort. This will code will take inputs and sort it then prints the median which is a floating-point number.

## QUESTION NO. 03: (using doubly linked list)

In this question according to the constraints the id should be there only the Fraudulent amount should be deleted so, I the approach which I have used is that to make these amount as zero on specific index and then print the remaining data.

# QUESTION NO. 05: (using doubly linked list)

In this question I have used the reverse linked list approach. Firstly, I have counted the nodes and then going in reverse direction I have printed the third last element and if the size of the linked list was less than three -1 is returned.

#### QUESTION NO. 04: (using doubly linked list)

In this question I have tried to implement all the required functions but failed to make that undo part. The functions are not giving the required outputs when reading .txt file.

**MEHAK FATIMA** 

B21110006057

DSA ASSIGNMENT\_02