

## Linked-List Assignment:

**(1)** Write a function that insert linked list node at any position. The function takes the data of the node and the node position as inputs.

For example if we have a linked list contains the following data nodes: 11 3 10 50 23 5 60

If you asked the function to insert a new node has data equals to 15 at position 3 the linked list should be: 11 3 10 15 50 23 5 60

**(2)** Write a Function that returns the data of the middle node in a linked list and in case the linked list contains only one node return the data inside this node.

**(3)** Write a function that returns the data inside the 5<sup>th</sup> element from the end of linked list and in case the linked list contains only one node return the data inside this node.

**(4)** Write a function that returns the sum of all the nodes in linked list.

**(5)** Write a function that returns the maximum data value in the linked list.