def delete\_at\_given\_position(self, target\_position):

        # case 1: List is empty

        if (self.head  == None):

            print("List is empty")

            return

        # case 2: position is invalid

        if (target\_position <= 0):

            print(f"Invalid target Position: {target\_position}")

            return

        # case 3: single node

        if ( self.head.next == None):

            self.head = None

            return

        # case 4: multi node

        to\_be\_deleted = self.head

        current\_position = 1

        while(current\_position < target\_position and to\_be\_deleted is not None):

            current\_position = current\_position + 1

            to\_be\_deleted = to\_be\_deleted.next

        if to\_be\_deleted == None:

            print(f" Target position {target\_position} is invalid, we have lesser nuber of node. ")

            return

        # case 4.1:  to\_be\_deleted node is the last node

        if (to\_be\_deleted.next == None):

            to\_be\_deleted.prev.next = None

            return

        # case 4.2: there are nodes after the to\_be\_deleted Node

        to\_be\_deleted.next.prev = to\_be\_deleted.prev

        to\_be\_deleted.prev.next = to\_be\_deleted.next