Datastructure-Queue Singly linked list

April 16, 2021

[117]:
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class node(object) :
    def __init__(self, data):
        self.data = data
        self.next = None

class singlylinkedlist(object):
    def __init__(self):
        self.head = None
        self.count = 0

    def append(self, node):
        if self.head == None:
            self.head = node
        else:
            currentnode = self.head
            while(currentnode.next != None):
                currentnode = currentnode.next
            currentnode.next = node
        self.count +=1

    def clear(self):
        self.head = None
        self.count = 0

    def prin2(self) :
        currentnode = self.head
        string = ""
        while currentnode:
            string += str(currentnode.data)
            if currentnode.next:
                string += "||"
            currentnode = currentnode.next
        print(string)

    def insertnode(self, node, index):
        currentnode = self.head
        i = 1
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        if(index == 1):
            previousnode = self.head
            self.head = node
            self.head.next = previousnode
        else :
            while(i+1<index):
                if(currentnode.next == None):
                    return -1
                currentnode = currentnode.next
                i+=1
                print('while')
            previousnode = currentnode.next
            currentnode.next = node
            currentnode = currentnode.next
            currentnode.next = previousnode
            print('outside while')
        self.count += 1

    def deletenode(self, index):
        currentnode = self.head
        i = 1
        if index == 1:
            self.head = current.next
        else :
            while i+1 < index :
                currentnode = currentnode.next
                i += 1
            new=currentnode.next.next
            currentnode.next = new
        self.count -=1
    def getdata(self, index):
        i = 1
        currentnode = self.head
        if index == 1 :
            return currentnode.data
        else :
            while(i < index):
                currentnode = currentnode.next
                i += 1
            return currentnode.data


if __name__ == "__main__":
    sl = singlylinkedlist()
    a = node(1)
    b = node(2)
    c = node(3)
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    d = node(4)
    e = node(5)

    sl.append(a)
    sl.append(b)
    sl.append(c)
    sl.append(e)

    sl.insertnode(d,4)
    sl.deletenode(3)
    sl.prin2()
    print(sl.getdata(2))
```

```
while
while
outside while
1||2||4||5
2
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[ ]:

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