

**Started on** Tuesday, 25 February 2025, 9:21 AM

**State** Finished

**Completed on** Tuesday, 25 February 2025, 10:07 AM

**Time taken** 46 mins

**Grade** 80.00 out of 100.00

Question 1

Correct

Mark 20.00 out of 20.00

Type a python function to insert elements at the beginning of the doubly linked list.

**Answer:** (penalty regime: 0 %)

Reset answer

```

1 class Node:
2     def __init__(self, data):
3         self.item = data
4         self.nref = None
5         self.pref = None
6
7 class DoublyLinkedList:
8     def __init__(self):
9         self.start_node = None
10
11     def insert_in_emptylist(self, data):
12         if self.start_node is None:
13             new_node = Node(data)
14             self.start_node = new_node
15         else:
16             print("list is not empty")
17
18     def insert_at_start(self, data):
19         new_node=Node(data)
20         if self.start_node is None:
21             self.start_node=new_node
22         else:

```

	Expected	Got	
✓	10	10	✓
	20	20	
	30	30	
	40	40	

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

Question 2

Correct

Mark 20.00 out of 20.00

Write a python program to insert an element (String) after the specified element in singly linked list.

**Answer:** (penalty regime: 0 %)

Reset answer

```

1 class Node:
2     def __init__(self, data):
3         self.data = data
4         self.next = None
5
6 class LinkedList:
7     def __init__(self):
8         self.head = None
9
10    def traverse_list(self):
11        if self.head is None:
12            print("List has no element")
13            return
14        else:
15            n = self.head
16            while n is not None:
17                print(n.data , " ")
18                n = n.next
19
20    def insert_at_start(self, data):
21        new_node = Node(data)
22        new_node.next = self.head

```

	Expected	Got	
✓	After inserting elements at the end AI DS ML After inserting elements at the beginning CS AI DS ML Inserting elements after the specified item CS AI DS R_PGM ML	After inserting elements at the end AI DS ML After inserting elements at the beginning CS AI DS ML Inserting elements after the specified item CS AI DS R_PGM ML	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

Question 3

Incorrect

Mark 0.00 out of 20.00

Define a function to delete the last element in the given linked list.

**Answer:** (penalty regime: 0 %)

Reset answer

```
1 class Node:
2     def __init__(self, data):
3         self.data = data
4         self.next = None
5
6 class delete_last:
7     def __init__(self):
8         self.head = None
9
10    def removeLastNode(self):
11        {{TYPE THE CODE}}
12
13    def push(self, data):
14        if self.head is None:
15            self.head = Node(data)
16            return
17        new_node = Node(data)
18        temp = self.head
19        while(temp.next):
20            temp = temp.next
21        temp.next = new_node
22
```

Syntax Error(s)

File "\_\_tester\_\_.python3", line 11

{{TYPE THE CODE}}

^

SyntaxError: invalid syntax

Incorrect

Marks for this submission: 0.00/20.00.

Question 4

Correct

Mark 20.00 out of 20.00

Write a python program to print the elements in forward and reverse direction in doubly linked list.

**Answer:** (penalty regime: 0 %)

Reset answer

```

1 class Node:
2     def __init__(self, data):
3         self.data = data
4         self.next = None
5         self.prev = None
6
7 class DoublyLinkedList:
8     def __init__(self):
9         self.head = None
10
11    def push(self, new_data):
12        new_node = Node(new_data)
13        new_node.next = self.head
14        if self.head is not None:
15            self.head.prev = new_node
16        self.head = new_node
17
18    def append(self, new_data):
19        new_node = Node(new_data)
20        if self.head is None:
21            self.head = new_node
22        return

```

	Expected	Got	
✓	Created DLL is:	Created DLL is:	✓
	Traversal in forward direction	Traversal in forward direction	
	1	1	
	7	7	
	6	6	
	4	4	
	Traversal in reverse direction	Traversal in reverse direction	
	4	4	
	6	6	
	7	7	
	1	1	

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

Question **5**

Correct

Mark 20.00 out of 20.00

Add destructor in the following python code

For example:

Input	Result
Kevin	Person Created
24	Kevin 24
	Kevin Object Destroyed

**Answer:** (penalty regime: 0 %)

Reset answer

```

1 class Person:
2     def __init__(self,name,age):
3         print("Person Created")
4         self.name = name
5         self.age = age
6     def printInfo(self):
7         print(self.name,self.age)
8     #add destructor
9         print(self.name,"Object Destroyed")
10
11 name=input()
12 age=int(input())
13 P1=Person(name,age)
14 #P2=Person("Joe",34)
15 P1.printInfo()
16 #P2.printInfo()
17 del P1

```

	Input	Expected	Got	
✓	Kevin 24	Person Created Kevin 24 Kevin Object Destroyed	Person Created Kevin 24 Kevin Object Destroyed	✓
✓	John 46	Person Created John 46 John Object Destroyed	Person Created John 46 John Object Destroyed	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.