

Started on Thursday, 17 July 2025, 3:14 PM

State Finished

Completed on Thursday, 17 July 2025, 3:51 PM

Time taken 37 mins 1 sec

Grade **100.00** out of 100.00

Question 1

Correct

Mark 20.00 out of 20.00

Write a Python class program to store all odd numbers between 500 and 600 in a reverse order using list comprehension

For example:

Input	Result
500 -2 600	[599, 597, 595, 593, 591, 589, 587, 585, 583, 581, 579, 577, 575, 573, 571, 569, 567, 565, 563, 561, 559, 557, 555, 553, 551, 549, 547, 545, 543, 541, 539, 537, 535, 533, 531, 529, 527, 525, 523, 521, 519, 517, 515, 513, 511, 509, 507, 505, 503, 501]

Answer: (penalty regime: 0 %)

```

1 ↓ class Generate:
2 ↓     def __init__(self, first,d,last):
3         self.first = first
4         self.d = d
5         self.last=last
6 ↓     def Ap_generate(self):
7         L=[i for i in range(self.last-1,self.first,self.d)]
8         return L
9 Series = Generate(500,-2,600)
10 print(Series.Ap_generate())

```

	Input	Expected	Got	
✓	500 -2 600	[599, 597, 595, 593, 591, 589, 587, 585, 583, 581, 579, 577, 575, 573, 571, 569, 567, 565, 563, 561, 559, 557, 555, 553, 551, 549, 547, 545, 543, 541, 539, 537, 535, 533, 531, 529, 527, 525, 523, 521, 519, 517, 515, 513, 511, 509, 507, 505, 503, 501]	[599, 597, 595, 593, 591, 589, 587, 585, 583, 581, 579, 577, 575, 573, 571, 569, 567, 565, 563, 561, 559, 557, 555, 553, 551, 549, 547, 545, 543, 541, 539, 537, 535, 533, 531, 529, 527, 525, 523, 521, 519, 517, 515, 513, 511, 509, 507, 505, 503, 501]	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

Question 2

Correct

Mark 20.00 out of 20.00

Define a function to delete the first 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 class delete_front:
6     def __init__(self):
7         self.head = None
8     def removeFirstNode(self):
9         if self.head is None:
10             print("List is already empty.")
11         else:
12             self.head = self.head.next
13     def push(self, data):
14         if self.head is None:
15             self.head = Node(data)
16             return
17         temp = Node(data)
18         temp.next = self.head
19         self.head = temp
20
21     def display(self):
22         temp1 = self.head

```

	Input	Expected	Got	
✓	5	Enter the number of elements to push: 8 4 6 2	Enter the number of elements to push: 8 4 6 2	✓
	2			
	6			
	4			
	8			
	9			

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

Question 3

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 4

Correct

Mark 20.00 out of 20.00

Write a python program to traverse 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

```

	Input	Expected	Got	
✓	50 10 20 100	Insert the element to add at the end Insert the element to add at the beginning Insert the element to add at the beginning Insert the element to add at the end Created DLL is: Traversal in forward direction 20 10 50 100	Insert the element to add at the end Insert the element to add at the beginning Insert the element to add at the beginning Insert the element to add at the end Created DLL is: Traversal in forward direction 20 10 50 100	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.

Question 5

Correct

Mark 20.00 out of 20.00

Write a python program to insert an element in the specified position 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 25 35 45 After inserting elements at the beginning 15 25 35 45 Inserting elements at the specific position 15 40 25 35 45	After inserting elements at the end 25 35 45 After inserting elements at the beginning 15 25 35 45 Inserting elements at the specific position 15 40 25 35 45	✓

Passed all tests! ✓

Correct

Marks for this submission: 20.00/20.00.