1. A screenshot of a computer

   Description automatically generated

To break this down a bit. In the code I created the SingleLinkedList and called it my\_list. And I pushed back 3 elements 1,2,3. With the head ->1 and the tail ->3 and it prints them out. I also popped out 1 and 3 which leaves 2. After that because we popped elements out of the list, and we checked if it was empty which it prints out false because it is not. Then I inserted 5 at index 1 so now the list is 2 -> 5 and we remove the element at index 1 which removes 5 and leaves the list to be 2. Finally, we try and find the element 3 and because it got popped out it is not there which is why we have “not found” as a printout.

1. A screenshot of a computer

   Description automatically generated

To break down this code I check if the stack is empty which at that time it is which is why it prints back yes. Then I push 10,20,30,40 into the stack and pop out element 40. So, the new stack is 10,20,30 and that is why the printout shows the top of the stack is 30. Because when you insert numbers into the stack it fills bottom up. (ex. 10 is at the bottom of the stack and 40 is at the top because it was the last element inserted into the stack). Then I took the elements left over added them up and divided by 3 (the remaining numbers) which is why we have 20 printed out.