**Lists in Python**

**Branch: CSE**

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**Find the outputs of given code segments**

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| **S.No.** | **Code Segment** |
| 1. | #Range of Indexes  thislist = ["apple", "banana", "cherry", "orange", "kiwi", "melon", "mango"]  print(thislist[2:5])  print(thislist[:4])  print(thislist[2:])  OUTPUT  **['cherry', 'orange', 'kiwi']**  **['apple', 'banana', 'cherry', 'orange']**  **['cherry', 'orange', 'kiwi', 'melon', 'mango']** |
| 2. | #Change Item Value  thislist = ["apple", "banana", "cherry"]  thislist[1] = "Rose"  print(thislist)  OUTPUT  **['apple', 'Rose', 'cherry']** |
| 3. | #Check if Item Exists  thislist = ["apple", "banana", "cherry"]  if "apple" in thislist:  print("Yes, 'apple' is in the fruits list")  OUTPUT  **Yes, 'apple' is in the fruits list** |
| 4. | #To add an item at the specified index, use the insert() method:  thislist = ["apple", "banana", "cherry"]  thislist.insert(1, "orange")  print(thislist)  OUTPUT  **['apple', 'orange', 'banana', 'cherry']** |
| 5. | #Add Items  thislist = ["apple", "banana", "cherry"]  thislist.append("orange")  print(thislist)  OUTPUT  **['apple', 'banana', 'cherry', 'orange']** |
| 6. | #The pop() method removes the specified index, (or the last item if index is not specified):  thislist = ["apple", "banana", "cherry"]  thislist.pop()  print(thislist)  OUTPUT  **['apple', 'banana']** |
| 7. | #Remove Item  thislist = ["apple", "banana", "cherry"]  thislist.remove("banana")  print(thislist)  OUTPUT  **[‘apple’, ‘cherry’]** |
| 8. | #Example :-The del keyword can also delete the list completely:  thislist = ["apple", "banana", "cherry"]  del thislist  # now if we print thislist it will show: **NameError: name 'thislist' is not defined**  OUTPUT |
| 9 | #Example:- The clear() method empties the list:  thislist = ["apple", "banana", "cherry"]  thislist.clear()  print(thislist)  OUTPUT  **[]** |
| 10 | #Copy a List  thislist = ["apple", "banana", "cherry"]  mylist = thislist.copy()  print(mylist)  OUTPUT  **['apple', 'banana', 'cherry']** |
| 11 | #Join Two Lists  list1 = ["a", "b" , "c"]  list2 = [1, 2, 3]  list3 = list1 + list2  print(list3)  OUTPUT  **[‘a’, ‘b’ , ‘c’, 1, 2, 3]** |
| 12 | #Example:- Use the extend() method to add list2 at the end of list1:  list1 = ["a", "b" , "c"]  list2 = [1, 2, 3]  list1.extend(list2)  print(list1)  OUTPUT  **['a', 'b', 'c', 1, 2, 3]** |
| 13 | # Nested List  A=["Happy", [2,0,1,5]]  print(A[0][1])  print(A[1][3])  OUTPUT  **a**  **5** |
| 14 | #List Membership Test  my\_list = ['p','r','o','b','l','e','m']  print('p' in my\_list)  print('a' in my\_list)  print('c' not in my\_list)  OUTPUT  **True**  **False**  **True** |
| 15. | A=[1,2,3,1,2,3,1]  print(A.count(1))  A.reverse()  print(A)  print(max(A))  print(min(A))  print(sum(A))  OUTPUT  **3**  **[1, 3, 2, 1, 3, 2, 1]**  **3**  **1**  **13** |