**PRACTICE SHEET**

**LIST**

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| **Question No 1a:**  **Create a list of numbers 1 to 5** |
| **Source Code:**  **l1 = [1,2,3,4,5]** |
| **Sample Input and Output:**  **Creating a list doesn’t give any output** |
| **Screenshot of the Output:** |

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| **Question No 1b:**  **Create a list of strings with fruit names** |
| **Source Code:**  **fruits = [“mango”,”banana”,”apple”,”pineapple”,”kiwi”,”grapes”,”orange”]** |
| **Sample Input and Output:**  **Creating a list doesn’t give any output** |
| **Screenshot of the Output:** |

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| **Question No 1c:**  **Create a mixed type of list** |
| **Source Code:**  **mixed = [“apple”,3,”fruits”,[“jake”,”james”]]** |
| **Sample Input and Output:**  **Creating a list doesn’t give any output** |
| **Screenshot of the Output:** |

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| **Question No 1d:**  **Consider any of the list above and Modify the elements of list by index** |
| **Source Code:**  **fruits[2] = “papaya”**  **print (fruits)** |
| **Sample Input and Output:**  **[‘mango’,’banana’,’papaya’,’pineapple’,’kiwi’,’grapes’,’orange’]** |
| **Screenshot of the Output:** |

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| **Question No 1e:**  **Consider any of the list above and Append an element to the end** |
| **Source Code:**  **l1.append(6)**  **print (l1)** |
| **Sample Input and Output:**  **[1,2,3,4,5,6]** |
| **Screenshot of the Output:** |

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| **Question No 1f:**  **Consider any of the list above and Insert an element at a specific index** |
| **Source Code:**  **mixed.insert(2,8)**  **print (mixed)** |
| **Sample Input and Output:**  **[‘apple’,3,8,’fruits’,[‘jake’,’james’]]** |
| **Screenshot of the Output:** |

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| **Question No 1g:**  **Consider any of the list above and Remove an element by value** |
| **Source Code:**  **fruits.remove(“kiwi”)**  **print (fruits)** |
| **Sample Input and Output:**  **[‘mango’,’banana’,’papaya’,’pineapple’,’grapes’,’orange’]** |
| **Screenshot of the Output:** |

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| **Question No 1h:**  **Consider any of the list above and Remove an element by index** |
| **Source Code:**  **l1.pop(5)** |
| **Sample Input and Output:**  **6** |
| **Screenshot of the Output:** |

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| **Question No 1i:**  **Find the length of the list that has been created above** |
| **Source Code:**  **print (len(fruits))** |
| **Sample Input and Output:**  **6** |
| **Screenshot of the Output:** |

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| **Question No 1j:**  **Consider any of the list above and Check if an element is in a list** |
| **Source Code:**  **if “orange” in fruits:**  **print (“element is in the list”)**  **else:**  **print (“element is not in the list”)** |
| **Sample Input and Output:**  **element is in the list** |
| **Screenshot of the Output:** |

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| **Question No 2:**  **Write a program to create two lists and concatenate them into a single list.** |
| **Source Code:**  **l1 = [2,4,6,8,10]**  **l2 = [1,3,5,7,9]**  **print (l1+l2)** |
| **Sample Input and Output:**  **[2, 4, 6, 8, 10, 1, 3, 5, 7, 9]** |
| **Screenshot of the Output:** |

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| **Question No 3:**  **Write a Python program to find the maximum and minimum values in a list.** |
| **Source Code:**  **list = [2, 4, 6, 8, 10, 1, 3, 5, 7, 9]**  **print ("Maximum value in the list is =",max(list),"minimum value in the list is =",min(list))** |
| **Sample Input and Output:**  **Maximum value in the list is = 10 minimum value in the list is = 1** |
| **Screenshot of the Output:** |

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| **Question No 4:**  **Write a Python program to remove all duplicate elements from a list and print the updated list.** |
| **Source Code:**  **l3 = [3,54,2,1,56,7,8,78,54,2,4,56,35,76,67,9,67,54,32,8,9,]**  **l4 = []**  **for i in l3:**  **if i in l4:**  **continue**  **else:**  **l4.append(i)**    **print (l4)** |
| **Sample Input and Output:**  **[3, 54, 2, 1, 56, 7, 8, 78, 4, 35, 76, 67, 9, 32]** |
| **Screenshot of the Output:** |

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| **Question No 5:**  **Write a program to check if a given element is present in a list.** |
| **Source Code:**  **fruits = [“mango”,”banana”,”apple”,”pineapple”,”kiwi”,”grapes”,”orange”]**  **if “orange” in fruits:**  **print (“element is in the list”)**  **else:**  **print (“element is not in the list”)** |
| **Sample Input and Output:**  **element is in the list** |
| **Screenshot of the Output:** |

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| **Question No 6:**  **Write a program to extract the first three elements from a list using list slicing.** |
| **Source Code:**  **l3 = [3,54,2,1,56,7,8,78,54,2,4,56,35,76,67,9,67,54,32,8,9,]**  **l5 = l3[0:3]**  **print (l5)** |
| **Sample Input and Output:**  **[3, 54, 2]** |
| **Screenshot of the Output:** |

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| **Question No 7:**  **Write a program to Create a list and use list slicing to extract the elements from index 2 to index 5.** |
| **Source Code:**  **l3 = [3,54,2,1,56,7,8,78,54,2,4,56,35,76,67,9,67,54,32,8,9,]**  **print (l3[2:5])** |
| **Sample Input and Output:**  **[2, 1, 56]** |
| **Screenshot of the Output:** |

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| **Question No 8:**  **Write a program to reverse the elements of the list using list slicing.** |
| **Source Code:**  **l3 = [3,54,2,1,56,7,8,78,54,2,4,56,35,76,67,9,67,54,32,8,9,]**  **print (l3[::-1])** |
| **Sample Input and Output:**  **[9, 8, 32, 54, 67, 9, 67, 76, 35, 56, 4, 2, 54, 78, 8, 7, 56, 1, 2, 54, 3]** |
| **Screenshot of the Output:** |

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| **Question No 9:**  **Write a program to Create a list and use list slicing to extract every alternate element.** |
| **Source Code:**  **l3 = [3,54,2,1,56,7,8,78,54,2,4,56,35,76,67,9,67,54,32,8,9,]**  **print (l3[::2])** |
| **Sample Input and Output:**  **[3, 2, 56, 8, 54, 4, 35, 67, 67, 32, 9]** |
| **Screenshot of the Output:** |

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| **Question No 10:**  **Write a program to extract the last three elements using negative list slicing.** |
| **Source Code:**  **l3 = [3,54,2,1,56,7,8,78,54,2,4,56,35,76,67,9,67,54,32,8,9,]**  **print (l3[-3:])** |
| **Sample Input and Output:**  **[32, 8, 9]** |
| **Screenshot of the Output:** |