DAY7:

-------

1.Arrays

2.Collections Introduction

3.List(ArrayList only)

QUESTIONS(Theory)

-------------------

1.What do you mean by an array and How to create an Array?

2.Can you change size of array once created?

3.Is it legal to initialize an array int i[] = {1, 2, 3, 4, 5}

4.Advantages and disadvantages of Array?

5.Can we change the size of an array at run time?

6.Can you declare an array without assigning the size of an array?

7.What is the default value of Array?

8.How to print element of Array?

9.How to compare Two Arrays?

10.How to sort an Array?

11.Can we declare array size as a negative number?

12.Can we add or delete an element after assigning an array?

13.Can we use Generics with the array?

14.What is collection and explain about types?

15.What is the difference between ArrayList and Vector?

16.What is the difference between ArrayList and LinkedList?

17.How to convert Array to List and List to Array

QUESTIONS(Find the below Output)

---------------------------------

QUESTION 1:

-----------

Description : Write a Java program to sum values of an array

Input a[]= {1, 2, 3, 4, 5, 6, 7, 8, 9, 10}

Output = 55

QUESTION 2:

------------

Description : Write a Java program to calculate the average value of array elements.

Input a[]= {1, 2, 3, 4, 5, 6, 7, 8, 9, 10}

Output = average = 7.0

QUESTION 3:

------------

Description : Write a Java program to remove duplicates from array

Input a[]= {10,10,20,50,60,80,60,50}

Output a[]= {10,20,50,60,80}

QUESTION 4:

-------------

QUESTION 4.1:

-------------

Description : Create a new ArrayListlist with values and find the length of it

Input : List = 10,20,30,90,10,10,40,50

QUESTION 4.2:

-------------

Description : Create a new LinkedListlist with values and find the length of it

Input : List = 100,200,300,400,500,600,700

QUESTION 4.3:

-------------

Description : Create a new vector with values and find the length of it

Input : List = 105,205,305,405,505,605,705,805

QUESTION 4.4:

-------------

Description : Create a new LinkedListlist with values and find the size() of it.

Input : List = 100,200,300,400,500,600,700

QUESTION 5:

------------

QUESTION 5.1:

--------------

Description : Get the first index value of 10

Input: List = 10,20,30,90

QUESTION 5.2:

--------------

Description : Get the last index value of 10

Input: List = 10,20,30,90,10,10,40,50

QUESTION 5.3:

--------------

Description : Get the index value of 50

Input: List = 10,20,30,90,10,10,40,50

QUESTION 5.4:

--------------

Description : Get the index value of 90

Input: List = 10,20,30,90,10,10,40,50

QUESTION 5.5:

--------------

Description : Get the each index value of 10 present in below list

Input: List = 10,20,30,90,10,10,40,50,10

QUESTION 5.6:

--------------

Description : Get the each index value of 70 present in below list

Input: List = 10,20,30,90,10,10,40,50,10

QUESTION 6:

------------

QUESTION 6.1:

--------------

Description : Get the value present at 2nd index

Input: List = 10,20,30,40,50,60

QUESTION 6.2:

--------------

Description : Get the value present at 4th index

Input: List = 100,200,300,400,500,600,700

QUESTION 6.3:

--------------

Description : Get the value present at 8th index

Input: List = 105,205,305,405,505,605,705,805

QUESTION 6.4:

--------------

Description : Get the each value of list by using normal for loop

Input: List = 105,205,305,405,505,605,705,805

QUESTION 6.5:

--------------

Description : Get the each value of list by using enhanced for loop

Input: List = 105,205,305,405,505,605,705,805

QUESTION 7:

------------

QUESTION 7.1:

--------------

Description : Remove the value present at 2nd index

Input: List = 10,20,30,40,50,60

QUESTION 7.2:

--------------

Description : Remove the value present at 10th index

Input: List = 10,20,30,90,10,10,40

QUESTION 7.3:

--------------

Description : Remove the last value of 10 present in the list

Input: List = 10,20,30,90,10,10,40

QUESTION 8:

-------------

QUESTION 8.1:

-------------

Description : Add a value 50 in the 2nd index and display the list after adding.

Input : List = 10,20,30,90,10,10,40,50

QUESTION 8.2:

-------------

Description : Add a value 70 at the end of the list

Input : List = 10,20,30,90,10,10,40,50

QUESTION 8.3:

-------------

Description : Add a value 80 at the 8th index of list

Input : List = 10,20,30,90,10,10,40,50

QUESTION 8.4:

-------------

Description : Add a value 100 at the last index of 10 in the list

Input : List = 10,20,30,90,10,10,40,50

QUESTION 9:

-----------

QUESTION 9.1:

-------------

Description : Replace the value 300 into 350 in the list

Input : List = 100,200,300,400,500,600,700

QUESTION 9.2:

--------------

Description : Replace the value present in 7th index as 90

Input: List = 10,20,30,90,10,10,40,50,10

QUESTION 9.3:

--------------

Description : Replace the 10 into 100 in List

Input: List = 10,20,30,90,10,10,40,50,30

Output: List = 100,20,30,90,100,100,40,50,30

QUESTION 10:

-------------

QUESTION 10.1:

--------------

Description : Create a new ArrayListlists with values and return the common values

Input : List = 10,20,30,90,10,10,40,50

Input : List = 30,40,50,60,80

QUESTION 10.2:

--------------

Description : Create a new ArrayListlists with values and return the common values

Input : List = 10,20,30,90,10,10,40,50

Input : List = 10,20,60,50,40,70,80,90

QUESTION 10.3:

--------------

Description : Create a new ArrayListlists with values and return the common values

Input : List = 10,20,30,40,50,60,70,80

Input : List = 100,200,300,400,500,600,700,8000

QUESTION 11:

-------------

QUESTION 11.1:

--------------

Description : Create a new ArrayListlists with values and perform removeAll() function

Input : List = 10,20,30,90,10,10,40,50

Input : List = 30,40,50,60,80

QUESTION 11.2:

--------------

Description : Create a new ArrayListlists with values and perform removeAll() function

Input : List = 10,20,30,90,10,10,40,50

Input : List = 10,20,60,50,40,70,80,90

QUESTION 11.3:

--------------

Description : Create a new ArrayListlists with values and perform removeAll() function

Input : List = 10,20,30,40,50,60,70,80

Input : List = 100,200,300,400,500,600,700,8000