

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