**Lab9**

**Programming Fundamentals (CS-130) FA22 Total=100**

1. Which of these standard collection classes implements a dynamic array?  
   a) AbstractList  
   b) LinkedList  
   c) ArrayList  
   d) AbstractSet
2. Text

   Description automatically generated

a) [B, B]

b) [B, A, B, A]

c) [A, B, A, B]

d) None of these

3. Text

Description automatically generated

a) Compile time error

b) [A, B, A, B]

c) [A, B, A, A]

d) None of these

4. Text

Description automatically generated

a) [A, V]

b) [A, null, null, null, V]

c) Compile time error

d) IndexOutOfBoundsException

5.Text

Description automatically generated

a) Compile time error

b) [A, B, null]

c) [A, B]

d) [A, B, A, null]

6. Graphical user interface, text

Description automatically generated with medium confidence

a) [A, B, C, D]

b) [A, D, B, C]

c) [A, D, C]

d) [A, B, C]

7. Graphical user interface, text, application

Description automatically generated

a) 0

b) 1

c) 2

d) Any Garbage Value

1. Write a Java program that keeps a number from the user and generates an integer between 1 and 7 and displays the name of the weekday (switch case).

**Test Data:**  
*Input number*: 3  
Expected Output : Wednesday

1. Write a Java program to find the number of days in a month. Switch the month and put year in case. Make sure check February whether its leap year or regular year (switch case with condition check for the month of February).

**Test Data**

*Input a month number:* 2

*Input a year:* 2016

*Expected Output :* February 2016 has 29 days

***Example:***

switch (month) {

case 1:

MonthOfName = "January";

number\_Of\_DaysInMonth = 31;

break;

1. Write a program in Java to input 5 numbers from keyboard and find their sum and average.

*Input the 5 numbers :*

1

2

3

4

5

*The sum of 5 no is* : 15

*The Average is* : 3.0

1. Create an ArrayList called new\_list and add <23,8,31, 45, 6, 7, 19, 15>

Iterate through the list and print all the numbers that is more than 10 but lesser than 20.

Carefully use **.remove()** function as this will remove the number from the list.

Write a Java program to search color “Red” in the arraylist.

Use **.contains()** method.

ArrayList contains() method in Java is used for checking if the specified element exists in the given list or not.

A screenshot of a computer

Description automatically generated with low confidence