

Abstract Data Type and Java Collections

PART(A)

Subject: CSW2(CSE3141)
Session: March 2022 to Aug 2022
Branch: CSE&CSIT
Section : All

- Q1.** Write a program to create an ArrayList of Integer type and perform the below operation on it.
- (a.) Display the list
 - (b.) Ask the user to enter a number and search that number is it present in the list or not.
 - (c.) Remove an element from an asked position.
 - (d.) Add a condition to check the ArrayList is empty or not.
- Q2.** Create a class Student having member variable name, age, mark and required member variable. Create an LinkedList of Student type and perform the below operation on it.
- (a.) Display the list
 - (b.) Ask the user to enter a student object and print the existence of the object. Specify is the object is search according to reference or contain.
 - (c.) Remove an specified student object.
 - (d.) Count the number of object present in the list.
- Q3.** Write a java program to convert a decimal to binary equivalent using stack(Stack collection).
- Q4.** Write a java program to evaluate a postfix expression using Stack.
- Q5.** Write a java program to traverse a graph using breadth first search (use ArrayDeque collection).
- Q6.** Write a java program to traverse a graph using depth first search (use Stack collection).