

Programme	:	B.Tech	Semester	:	Fall 20-21
Course	:	Data structures and Algorithms (Embedded Lab)	Code	:	CSE2003
Faculty	:	Dr.B. Saleena / Dr.V.M.Nisha	Slot	:	L43+L44

Exercise -5 (18/8/2020)

Doubly linked list

- Upload a single WORD/ PDF document in the Moodle with all the programs, screenshots of input, and output for each program.
 - **The Upload File must be named in this convention only Regno_Name (Example, 19BCE1001_Rahul) – Strictly to be followed.**
1. Write a C Program to
 - (i) Create a list of numbers using a doubly linked list and display the contents of the list.
 - (ii) Search for a give number in the list and display if the number is present or not in the list.
 2. A goldsmith wants to make a chain by attaching some gold coins. The gold coins are numbered as follows: 10, 15, 20, 25, 30, 35, and 40. The goldsmith uses coin number 10 as the first coin, coin number 40 as the last coin and the rest of the coins in between the first and last coin for his chain. Devise an appropriate C program for
 - (i) Making the chain
 - (ii) After making the chain he finds that two of the coins 20 and 40 were damaged, so he wants to replace coins 20 and 40 by 200 and 400.