

University of Central Punjab

Faculty of CS and IT



Course Code: CSCP2033
Assessment Tool: Assignment 2
Teacher: Rabia Arshad
Submission Date: 5th May, 2023

Course Title: Data Structures & Algorithms
Term: Spring 2023
Date of Assignment: 2nd May, 2023
Section: D11

Instructions:

- Submission after the mentioned date will not be accepted. Only portal generated submissions will be accepted.
- You must upload a folder containing your code file, screen shot of run time, as well as text file (notepad) of code.
- Please write the names of file with as Question No, while uploading.
- For further queries you can contact at rabia.arshad@ucp.edu.pk

Question 1:

Write a program to implement a singly linked list in C++ using only head pointer. Linked list should store characters (small and capital alphabets, numbers and symbols). You must implement a function to arrange the elements in the linked list according to the following pattern:

- i. All integers must appear before alphabets and symbols
- ii. All lower-case letters must come before upper-case letters
- iii. Symbols must appear after numbers and alphabets

The function should be a member function of the Linked List class.

Example input:

A 1 b y 6 ? F 8 & h j %

Example output:

1 6 8 b y h j A F ? & %