Discrete Structure CS211

Semester Project

Mam Saba Naseem

BSCS-3A



National University of Computer & Emerging Sciences

Department of Computer Science

General Guidelines

General Guidelines

- 1. Peer plagiarism will result in zero marks.
- 2. Marks will be given based on viva. Make sure to submit the project on google classroom otherwise your viva will not be taken.
- 3. You are allowed to use only C++ for this project.
- 4. Bonus marks for those who will implement this project using windows form (C# .NET Framework).
- 5. **Group members** should be TWO (02).
- 6. Make Zip Folder that includes word file (paste source code + output's screenshot) and CPP files of project. Submit Zip folder on Google Classroom.
- 7. There should be at least five screenshots for each question with different inputs.
- 8. If you violate any single guideline, then don't bother to come for the viva. You will be given straight zero.
- 9. In case of any ambiguity/query, mail me at f200276@cfd.nu.edu.pk

Total marks: 30

Part 1

Question No 1

(20)

Write a cpp code that takes any Expression as Input and print its Truth Table.

Question No 2

(40)

Take input of three sets each of at least three elements, Find weather these relations exist or not. Also find number of Relations.

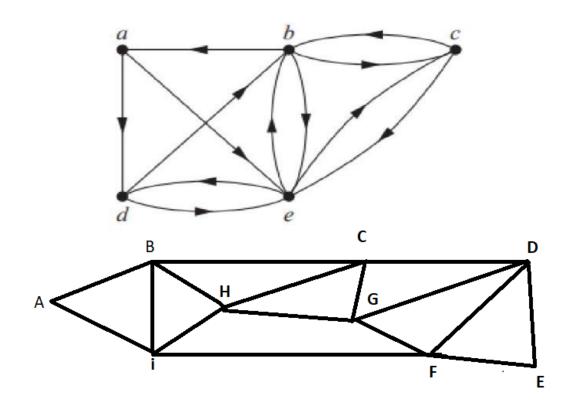
Any addition of set would indicate the kind of relation that exists between the sets first...

- 1. The Total number of relations
- 2. Reflexive Relations
- 3. Symmetric Relations
- 4. Anti-Symmetric Relations
- 5. Transitive Relations
- 6. Both Reflexive and Symmetric Relations
- 7. Both symmetric and Anti-symmetric Relations

Part 2 (40)

Question No 3

Construct Euler Circuit and Euler Path for given Graphs if Exist.



GOOD LUCK