

CS211: Mathematics for Computer Science Assigned: Wednesday, September 25^{th} , 2019 Due: Wednesday, October 9^{th} , 2019

Programming Assignment 1 Implementing Different Set Operations

1 Description

Write a program that takes:

- 1. An input a list of strings as a Universe.
- 2. Then takes another input a number of sets (that are subsets of the universe)
- 3. Then ask the user about the operations they want to perform (3 required features to be implemented in this assignment):
 - Union of two sets
 - Intersection of two sets
 - Complement of a set

2 Delivery Requirements

- You are allowed to use (C++, Java or Python) for implementing this assignment.
- A detailed report is required, it should contain:
 - Problem statement.
 - Used data structures.
 - Algorithms used documented using flow charts or pseudo code.
 - Code Snippets.
 - Sample runs.
 - Assumptions and details you find necessary to be clarified.

3 Notes

- You have to work in groups of 2.
- You should send your report by email to: fadynabilyacoub@gmail.com with subject: DiscreteAssignment1 [Name1 id1, Name2 id2]
- You are not allowed to use built in **Set** data structure or any data structure similar to it.
- Make sure you provide a clear and detailed report.