



Computer Engineering Department
(Discrete Mathematics (10636215)

HW1

Deadline: 19/06/2022 midnight

10 points

Write a C program to solve the following logical problem (Who is chatting?):

Five friends have access to a chat room. Is it possible to determine who is chatting if the following information is known?

Either Kevin or Heather, or both, are chatting.

Either Randy or Vijay, but not both, are chatting.

If Abby is chatting, so is Randy.

Vijay and Kevin are either both chatting or neither is.

If Heather is chatting, then so are Abby and Kevin.

A. Your program should use one of the following ways (only one).

1. The truth tables
2. Random generator for generating 0 (false) or 1 (true):

For the truth table, read a truth table of five variables from a file using FILE structure.

For random generator, you may use `srand(int seed)` and `rand()` functions from `#include <stdio>`. Make sure to generate just 0 and 1.

B. Your program should print who is chatting in the following format, for example,
Kevin, Randy, and Heather are chatting...

Good Luck