

# CSE435 Introduction to EDA & Testing - Spring 2022

## Homework Assignment #6

Shao-Hsuan Chu - B073040018

About Path-Oriented Decision Making (PODEM), please answer the following questions according to Figure 1.

1-4 PODEM (See Figure 1)

1. (15%) Derive the effective test set for G5 SA0 by PODEM

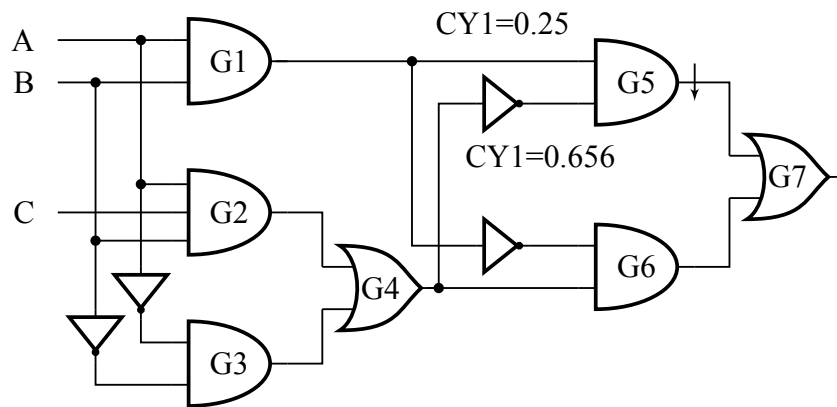


Figure 1

**Solution:**

2. (15%) Derive the effective test set for G5 SA0 by PODEM with More Intelligent Backtracing

**Solution:**

3. (15%) Derive the effective test set for G5 SA0 by PODEM with Unguided Backtracing

**Solution:**

4. (15%) Please compare the above (1), (2), (3). [Chapter 10, slides 7-23]

**Solution:**

5. (15%) What are the difference between Backtracking and Backtracing? Please show by example.

**Solution:**

6. (25%) FAN (See Figure 2)

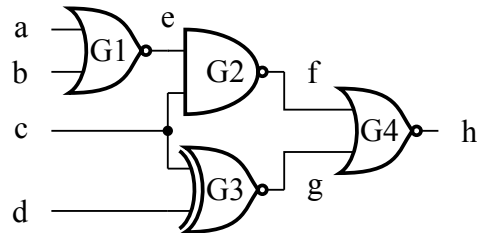


Figure 2

- (a) (15%) Generate a test for the fault f-sa1 by using FAN algorithm.

**Solution:**

- (b) (10%) What are the differences between PODEM and FAN?

**Solution:**