

# COMPSCI 2XC3 Lab Report 2

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## Part 1

### Experiment 1

In our experiment finding probabilities of cycles existing in graph, we used the following parameters:

- 100 Nodes
- ranging from 0 to 100 edges
- running 1000 tests per edge amount

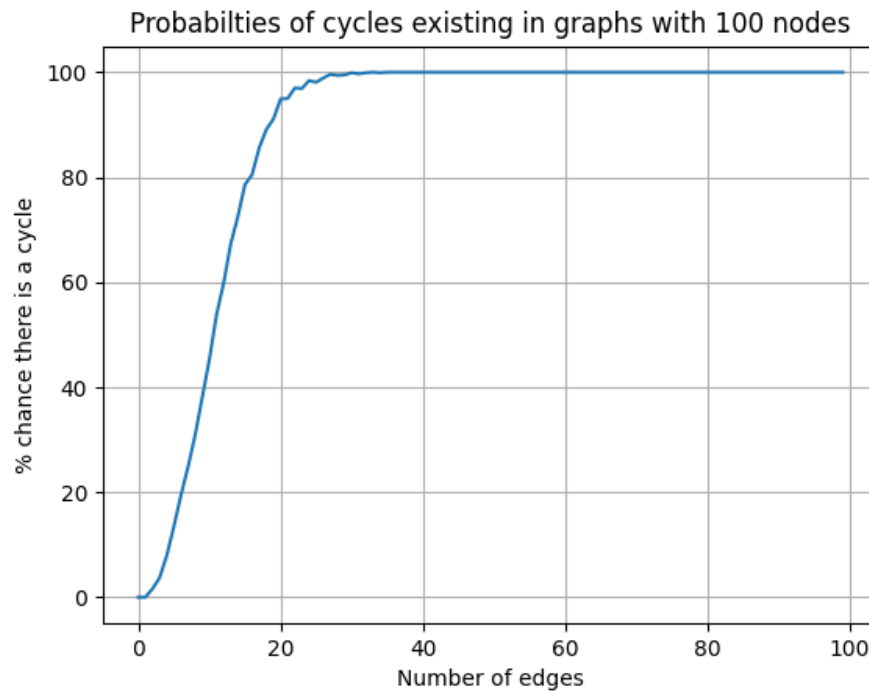


Figure 1: Probabilities of cycles existing in graphs with 100 nodes

You can see that at around 40 edges, the graph tops out meaning that it's almost assured that a random graph with 100 nodes and  $> 40$  edges will have a cycle.

### Experiment 2

## Part 2