King Saud University
College of Computer and Information Sciences
Department of Computer Science

CSC 220: Computer Organization

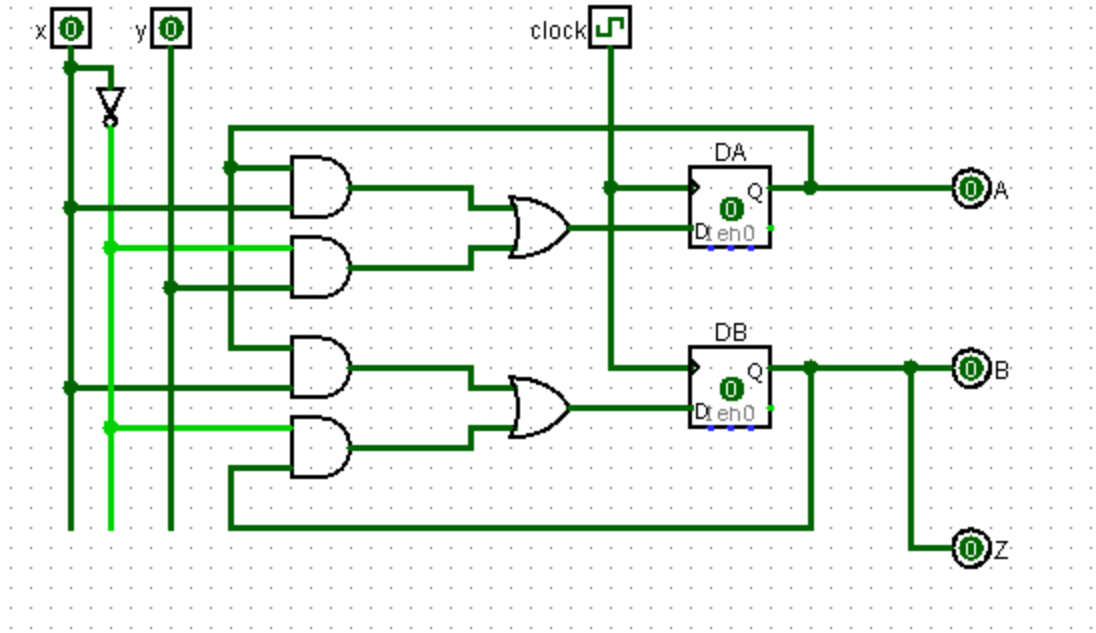
Labwork - 7

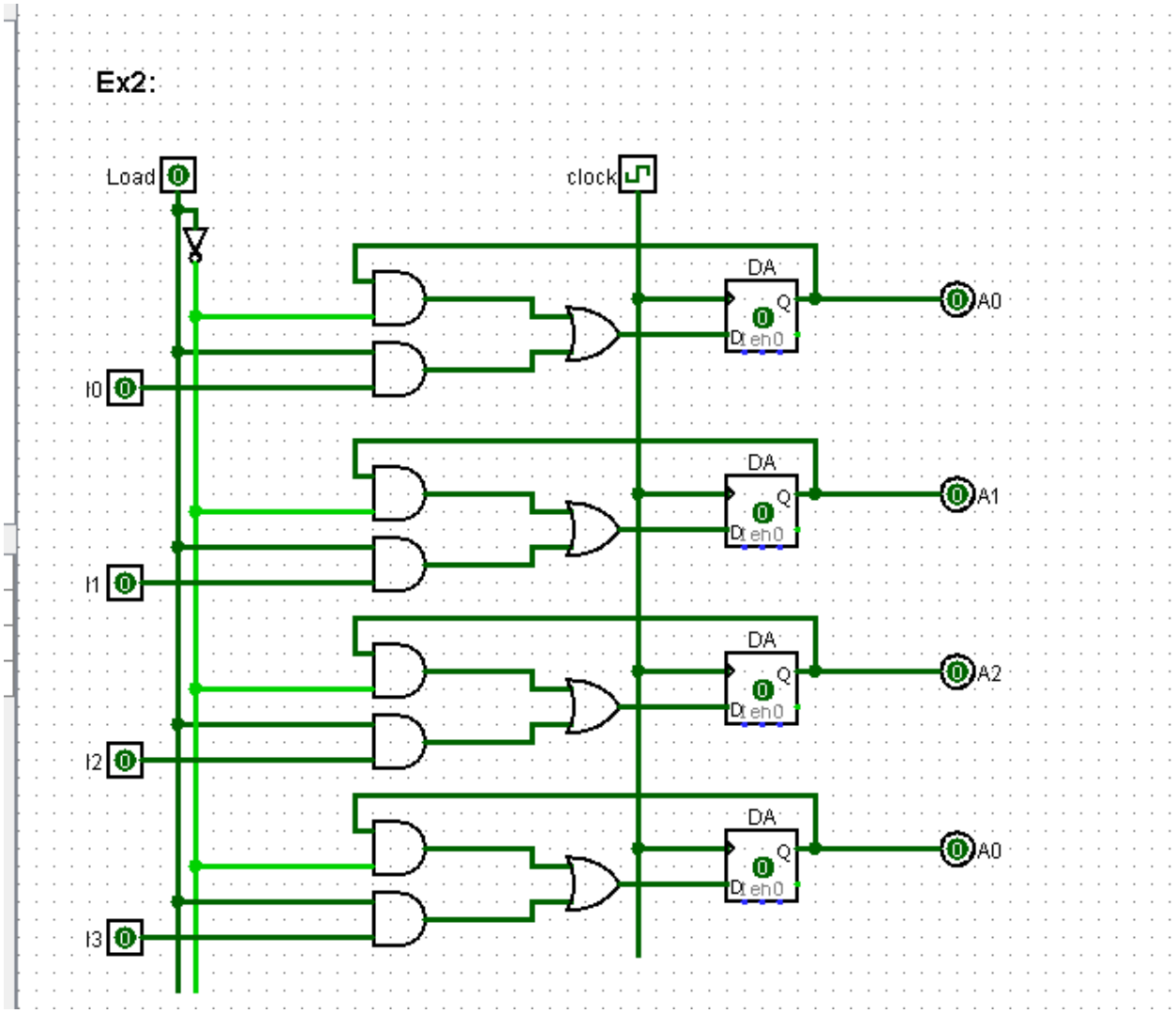
1. Introduction

In this lab we were asked to do two experiments, the first one is to design a logic diagram of a sequential circuit that has two D flip-flops and two inputs and one output, in the second experiment we were given a register designed by logic gates and D flip-flops and we were asked to design it.

2. Experiments

Ex1:





3. Results

Q1:

Da = x'y+xA

Db = x'B+xA

Z=B

Q2:

Da0=Load'A0+LoadI0

Da1=Load'A1+LoadI1

Da2=Load'A2+LoadI2

Da3=Load'A3+Loadl3

4. Discussion

In this week's lab we had two experiments, in the first one we designed a logic diagram for some equations given to us using basic logic gates and two D-flip flops and in the second experiment we designed using 4 D-flip flops.