

MARMARA UNIVERSITY
FACULTY OF ENGINEERING
COMPUTER SCIENCE AND ENGINEERING DEPARTMENT
CSE3015 DIGITAL LOGIC DESIGN
TERM PROJECT



CPU DESIGN

Prepared By:

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150118882 Hasancan Özen

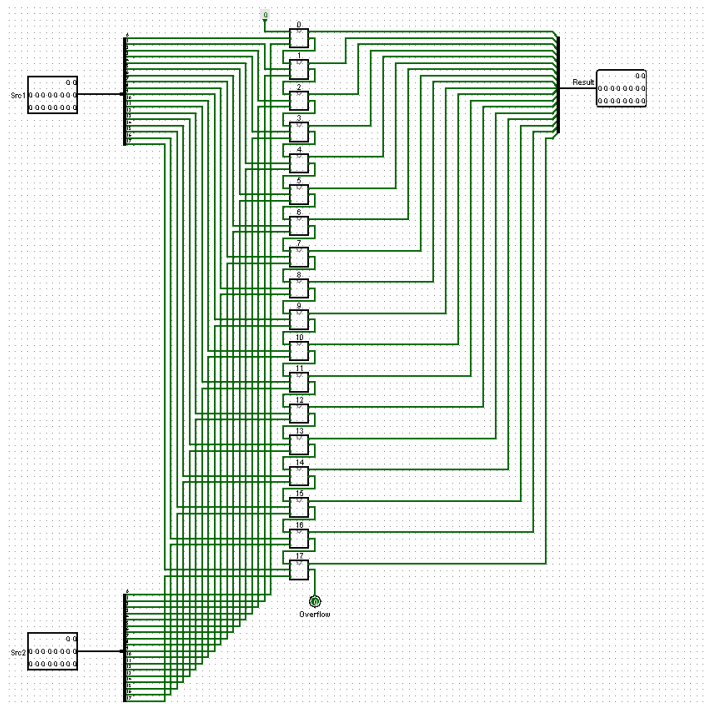
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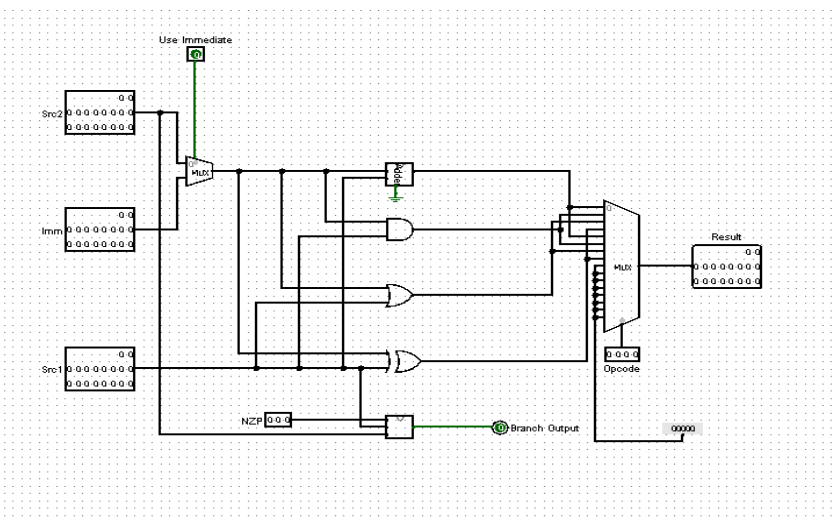
Description

In this project, with use our own instruction set architecture, we designed a CPU. The CPU consists of the following components:

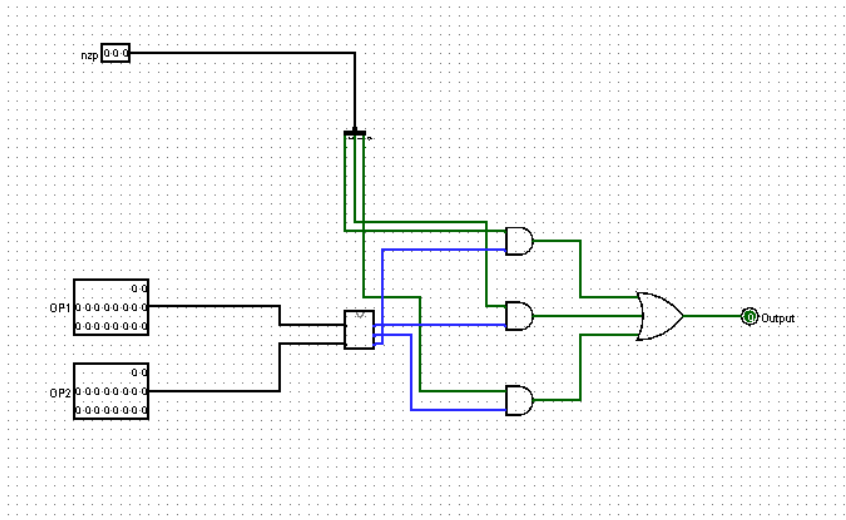
Adder



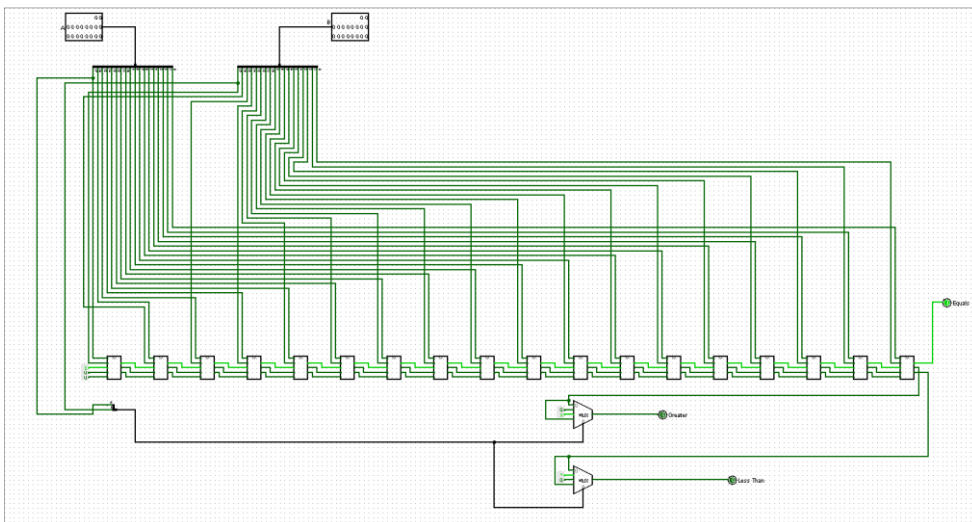
Arithmetic Logic Unit



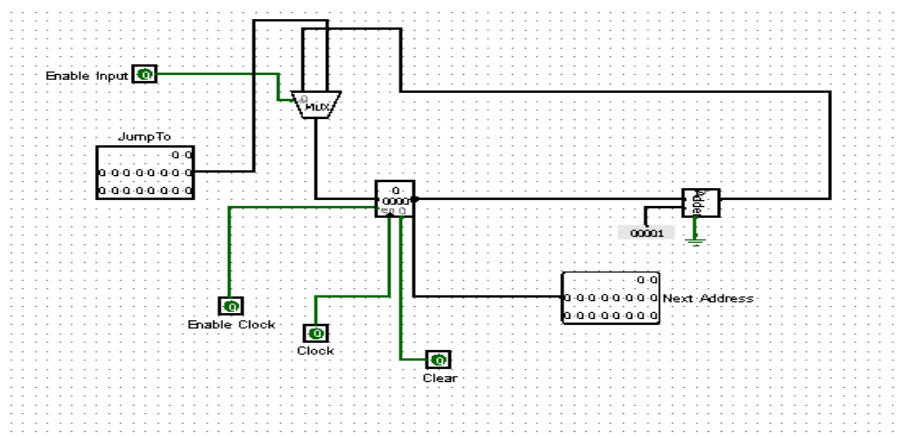
Branch



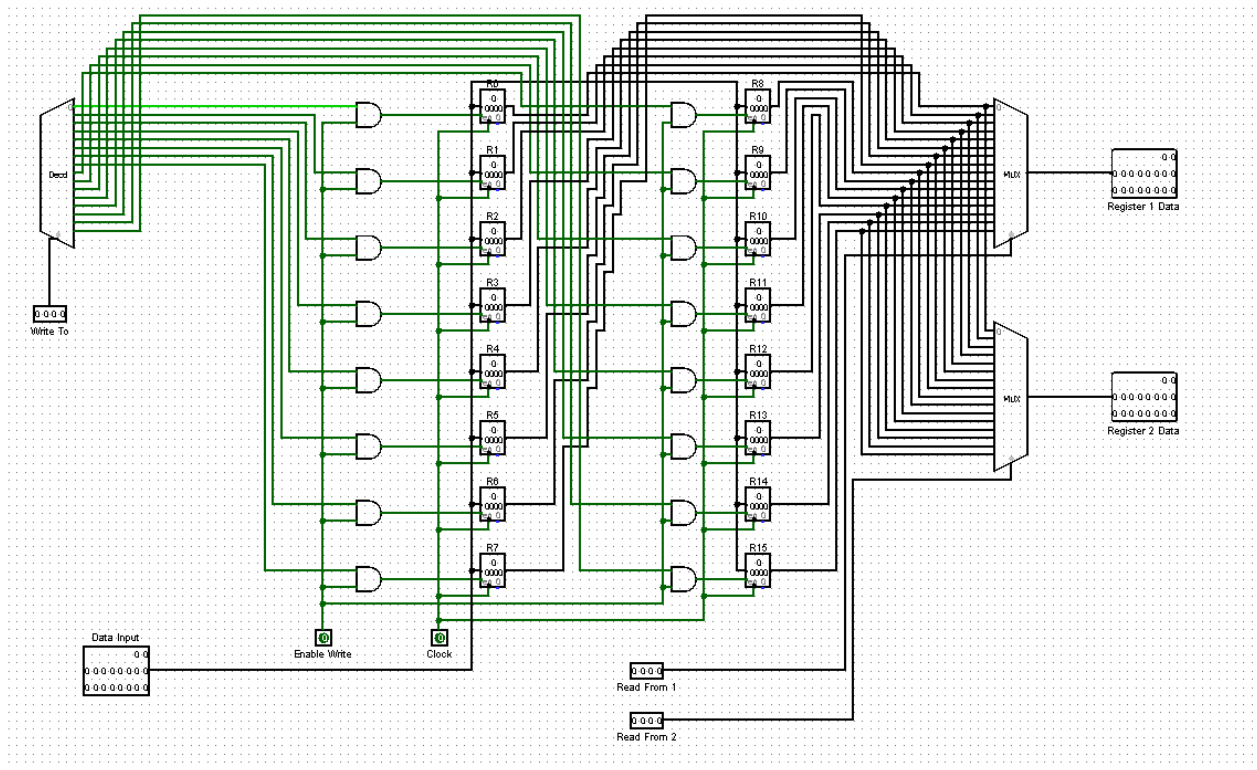
Comparator



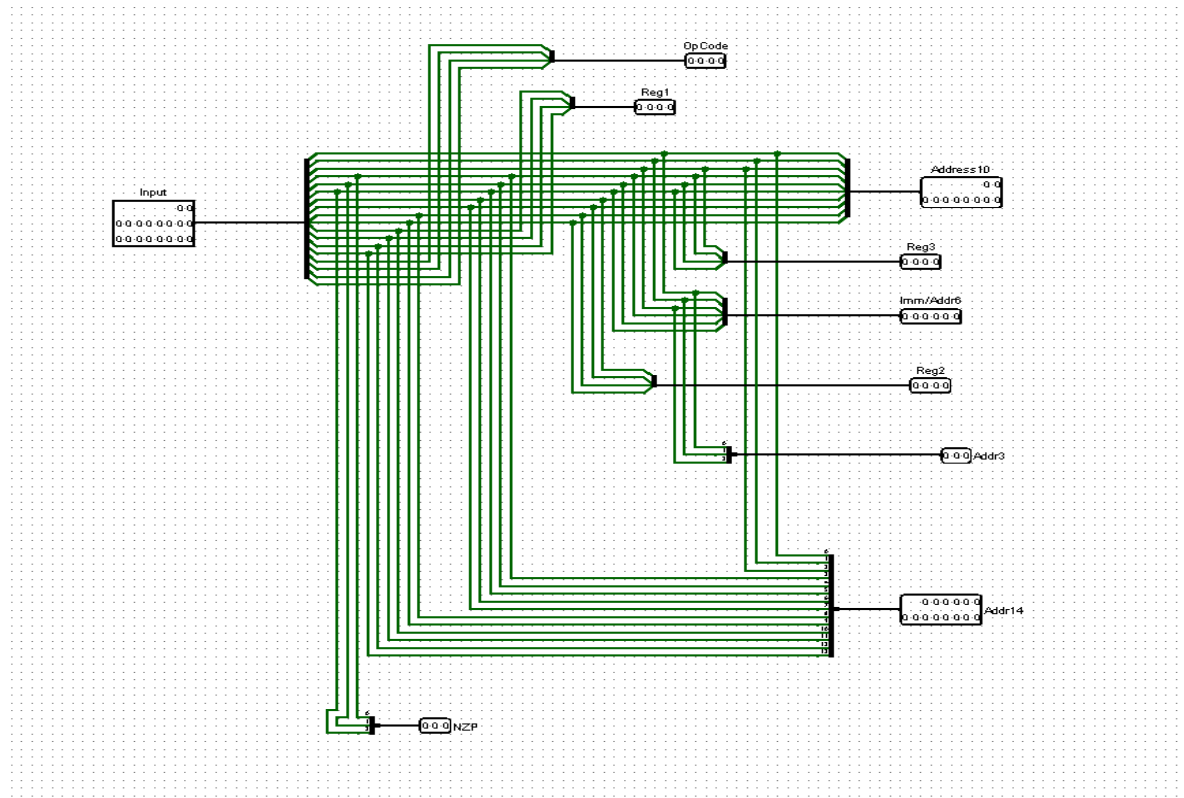
Program Counter



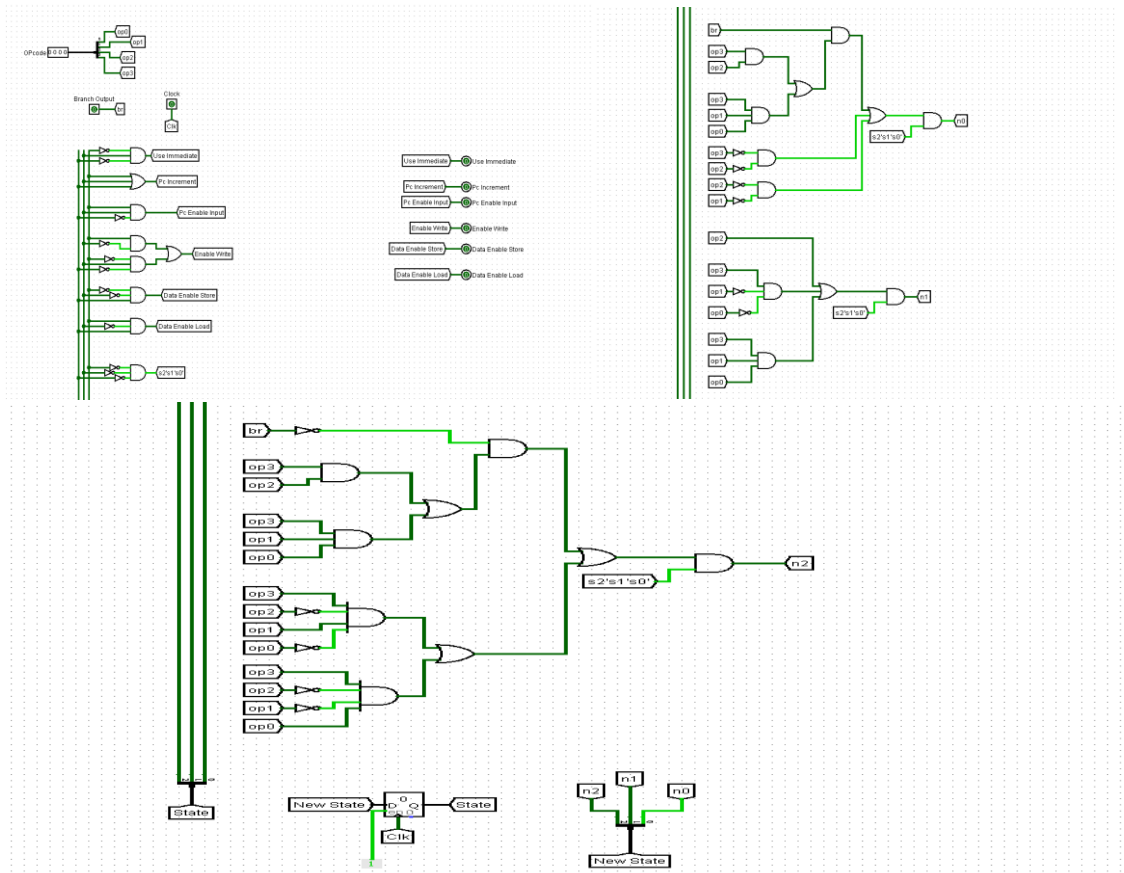
Register File



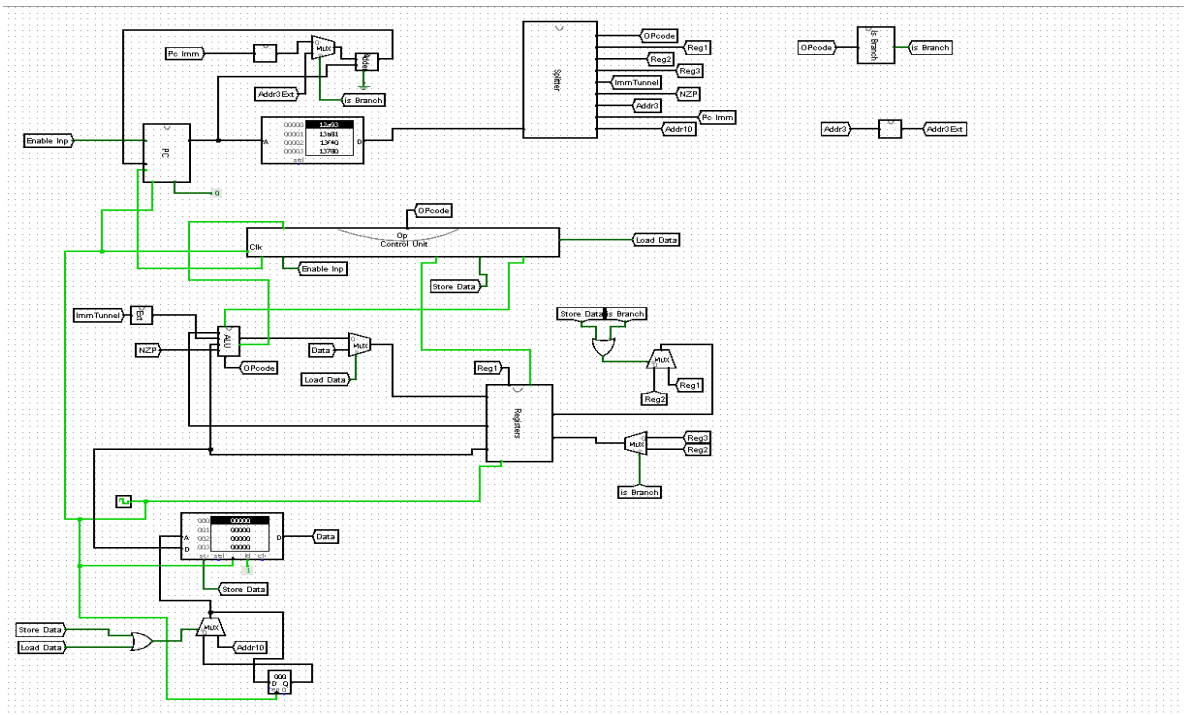
Splitter



Control Unit



Main Circuit



Finite State Machine of Control Unit

