CYPRUS INTERNATIONAL UNIVERSITY FACULTY OF ENGINEERING

***CMPE226 / ISYE226 / ITEC226 / COMP122***

***Computer Architecture and Organization***

Spring 2019/2020 Homework #2

Barış Karapelit

21707346

Due Date : 17 / 04 / 2020, 23:00

***Binary Parallel Subtractor:*** Design a ***4-bit*** binary ***subtractor*** which will perform the subtraction of two 4-bit binary numbers using **full-adder block(s)** and **XOR gate(s)** only.

|  |  |  |
| --- | --- | --- |
| A | B | B’ |
| 0 | 0 | 1 |
| 1 | 0 | 1 |
| 0 | 1 | 0 |
| 1 | 1 | 0 |

A-B = A+ (B 2. implement)

A-B= A + (B’+1)

A-B=A+B’+1

B’=1100+ 1= 1101

0101

+ 1101

Carry out<=1 0010





