SYSC2310 – Lab 2

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|  |  |
|  | Reverse Distributive Law, 1 |
|  | Reverse Distributive Law, 2 |
|  | Complement Law, Identity Law, 3 |
|  | Distributive Law, 4 |
|  | Associative Law, Reverse Distributive Law, 5 |
|  | Complement Law, Identity law, 6 |
|  | Associative, Reverse Distributive Law, 7 |
|  | Distributive Law, 8 |
|  | Complement Law, 9 |
|  | Identity Law, 10 |
|  | Distributive Law, 11 |

#gates for F1: 14 //correction: 19 (do not forget the NOT gates)

#gates for F2: 5 //correction: 6

Practice on using boolean algebra

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| --- | --- |
|  |  |
|  | Distributivity Law |
|  |  |

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| --- | --- |
|  |  |
|  | Reverse Distributive Law, 1 |
|  | Distributive Law, 2 |
|  | Complement Law, Identity law, 3 |
|  | Distributive Law, 4 |
|  | Complement Law, Identity law, 5 |
|  |  |

Ex3

Objective: design a 3-bit by 3-bit binary multiplier

Algorithm followed: <https://www.youtube.com/watch?v=Va_UvwJULcI>

To import: Full-adder from Lab 1

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| --- | --- |
| A2 A1 A0 |  |
| x B1 B0 |  |
| A2B0 A1B0 A0B0 |  |
| +A2B1 A1B1 A0B1 0 | PerformUse full-adder from Lab 1 |
| M4 M3 M2 M1 M0 |  |
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