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Date: 8/28/20

**PRELAB:**

**Q1.** Fill in the Truth Table below for an AND gate:

|  |  |  |
| --- | --- | --- |
| **A** | **B** | **C** |
| 0 | 0 | 0 |
| 0 | 1 | 0 |
| 1 | 0 | 0 |
| 1 | 1 | 1 |

**Q2.** What does the .bdf file extension stand for?

**Bit Distribution Format**

**LAB:**

**2.0 Fill in the Truth Table for *lab1step1*:**

|  |  |  |
| --- | --- | --- |
| **A** | **B** | **C** |
| 0 | 0 | 0 |
| 0 | 1 | 0 |
| 1 | 0 | 0 |
| 1 | 1 | 1 |

Logic Expression: A • B = C(A, B)

**4.0 Fill in the Truth Table for *lab1step2*:**

|  |  |  |  |
| --- | --- | --- | --- |
| **W** | **X** | **Y** | **Z** |
| 0 | 0 | 0 | 0 |
| 0 | 0 | 1 | 0 |
| 0 | 1 | 0 | 1 |
| 0 | 1 | 1 | 0 |
| 1 | 0 | 0 | 1 |
| 1 | 0 | 1 | 0 |
| 1 | 1 | 0 | 0 |
| 1 | 1 | 1 | 1 |

Logic Expression: (!W • !Y • X) + (W • !Y • !X) + (W • X • Z) = Z(W, X, Y)

**4.0 Fill in the Truth Table for *lab1step3*:**

|  |  |  |  |
| --- | --- | --- | --- |
| **A** | **B** | **C** | **F** |
| 0 | 0 | 0 | 0 |
| 0 | 0 | 1 | 1 |
| 0 | 1 | 0 | 0 |
| 0 | 1 | 1 | 1 |
| 1 | 0 | 0 | 0 |
| 1 | 0 | 1 | 1 |
| 1 | 1 | 0 | 1 |
| 1 | 1 | 1 | 0 |

Logic Expression: (!A • B • !C) + (!A • B • C) + (A • !B • C) + (A • B • !C) = F(A, B, C)