View Solutions and Grades

Graded (Black)

Not yet Graded (Grey)

Software Engineering
Assignment 4 (97.5%)
Deadline: 04.02.15, 12:00pm
Instructions file:
View Solutions

Human Computer Interaction
Homework 4
Deadline: 05.02.15, 12:00pm
Instructions file:

Marketing
Homework 3
Deadline: 07.02.15, 12:00pm
Instructions file:

Databases and Web Applications
Assignment 2
Deadline: 10.02.15, 12:00pm
Instructions file:

Marketing
Homework 3
Deadline: 07.02.15, 12:00pm
Instructions file:

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Not yet Graded (Grey)

Software Engineering

You have not yet submitted a file for this homework

Go Back

Assignment 2
Deadline: 10.02.15, 12:00pm
Instructions file:

Marketing

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Deadline: 07.02.15, 12:00pm
Instructions file:

Software Engineering

Assignment 4 (97.5%)

Deadline: 04.02.15, 12:00pm

Instructions file:

My Work

Solutions

Grade Breakdown

Messsage TA

PROBLEM 2.3

Lee, pg 2

M, N, Q

$(\bar{M}\cdot N\cdot Q)(Q\cdot\bar{N}\cdot M)(\bar{Q}\cdot N\cdot M) = X$

Truth table

	M	N	Q	X
①	0	0	0	0
②	0	0	1	0
③	0	1	0	0
④	1	0	0	0
⑤	0	1	1	1
⑥	1	1	0	0
⑦	1	0	1	1
⑧	1	1	1	1

① $(1\cdot0\cdot0)(0\cdot1\cdot0)(0\cdot0\cdot0)$ → $\bar{0}\,\bar{0}\,\bar{0}$ = 1 1 1 → $\overline{(1\cdot1\cdot1)} = (\bar{1}) = 0$

② $(1\cdot0\cdot1)(1\cdot1\cdot0)(1\cdot0\cdot0)$ → $\bar{0}\,\bar{0}\,\bar{0}$ = 1 1 1 → $\overline{(1\cdot1\cdot1)} = (\bar{1}) = 0$

③ $(1\cdot1\cdot0)(0\cdot0\cdot0)(0\cdot1\cdot0)$ → $\bar{0}\,\bar{0}\,\bar{0}$ = 1 1 1 → $\overline{(1\cdot1\cdot1)} = (\bar{1}) = 0$

④ $(0\cdot0\cdot0)(0\cdot1\cdot1)(0\cdot0\cdot1)$ → $\bar{0}\,\bar{0}\,\bar{0}$ = 1 1 1 → $\overline{(1\cdot1\cdot1)} = (\bar{1}) = 0$

⑤ $(1\cdot1\cdot1)(1\cdot0\cdot0)(1\cdot1\cdot0)$ → $\bar{1}\,\bar{0}\,\bar{0}$ = 0 1 1 → $\overline{(0\cdot1\cdot1)} = (\bar{0}) = 1$

⑥ $(0\cdot1\cdot0)(0\cdot0\cdot1)(1\cdot1\cdot0)$ → $\bar{0}\,\bar{0}\,\bar{0}$ = 1 1 1 → $\overline{(1\cdot1\cdot1)} = 0$

⑦ $(0\cdot0\cdot1)(1\cdot1\cdot1)(1\cdot0\cdot1)$ → $\bar{0}\,\bar{1}\,\bar{0}$ = 1 0 1 → $\overline{(1\cdot0\cdot1)} = (\bar{0}) = 1$

⑧ $(0\cdot1\cdot1)(1\cdot0\cdot1)(1\cdot1\cdot1)$ → $\bar{0}\,\bar{0}\,1$ = 1 1 0

$(1\cdot1\cdot0) = (\bar{0}) = 1$

Using Boolean Algebra to form (a) simplified Boolean expression(5)

① $\bar{M}\cdot N\cdot Q = \bar{M}NQ + M\bar{N}Q + MNQ = (M+N)\cdot Q$