# **ASSIGNMENT #1**

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# **Question #1**

You are required to draw the NAND based Circuit Diagram for the given boolean expressing using Electronic WorkBench (Logic Converter).

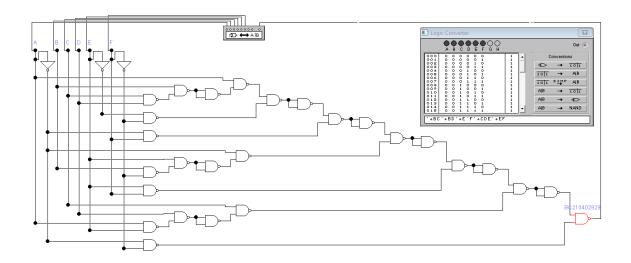
$$Z = AB(\overline{C} + \overline{D}) + \overline{E}\overline{F} + \overline{A}F + \overline{A}E(\overline{B} + F) + EF + CD(\overline{A} + \overline{E}) + \overline{A}\overline{F}$$

## **Solution**

### **Given Expression**

AB(C'+D')+E'F'+A'F+A'E(B'+F)+EF+CD(A'+E')+A'F'

#### **Screenshot**



#### **Simplified Expression**

A'+BC'+BD'+E'F'+CDE'+EF