Name: Boxiang Lin

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Cmder

C:\Users\boxiang\Desktop\350-BDD-project (b1)
λ python bdd.py
============================================ Testcases for boolean formula ============================================
R boolean formula tested:        True as expected
prime boolean formula tested:    True as expected
even boolean formula tested:     True as expected

R boolean formula:       ~x1&~x2&~x3&~x4&~x5&~y1&~y2&~y3&y4&y5|~x1&~x2&~x3&~x4&~x5&~y1&y2&~y3&~y4&~y5|~x1&~x2&~x3&~x4&x5&~y1&~y2&y3&~y4&~y5|~x1
&~x2&~x3&~x4&x5&~y1&y2&~y3&~y4&y5|~x1&~x2&~x3&x4&~x5&~y1&~y2&y3&~y4&y5|~x1&~x2&~x3&x4&~x5&~y1&y2&~y3&y4&~y5|~x1&~x2&~x3&x4&x5&~y1&~y2&y3&y4&~y5
|~x1&~x2&~x3&x4&x5&~y1&y2&~y3&y4&y5|~x1&~x2&x3&~x4&~x5&~y1&~y2&y3&y4&y5|~x1&~x2&x3&~x4&~x5&~y1&y2&~y3&~y4&~y5|~x1&~x2&x3&~x4&x5&~y1&~y2&y3&~y4&~
y5|~x1&~x2&x3&~x4&x5&~y1&y2&y3&~y4&y5|~x1&~x2&x3&x4&~x5&~y1&y2&~y3&~y4&y5|~x1&~x2&x3&x4&~x5&~y1&y2&y3&y4&~y5|~x1&~x2&x3&x4&x5&~y1&~y2&y3&~y4&~y5
|~x1&~x2&x3&x4&x5&~y1&y2&y3&y4&y5|~x1&x2&~x3&~x4&~x5&~y1&y2&~y3&y4&y5|~x1&x2&~x3&~x4&~x5&y1&~y2&~y3&~y4&~y5|~x1&x2&~x3&~x4&x5&~y1&y2&y3&~y4&~y5
|~x1&x2&~x3&~x4&x5&y1&~y2&~y3&~y4&y5|~x1&x2&~x3&x4&~x5&~y1&y2&y3&~y4&y5|~x1&x2&~x3&x4&~x5&y1&~y2&~y3&y4&~y5|~x1&x2&~x3&x4&x5&~y1&y2&y3&y4&~y5|~
x1&x2&~x3&x4&x5&y1&~y2&~y3&y4&y5|~x1&x2&x3&~x4&~x5&~y1&y2&y3&y4&y5|~x1&x2&x3&~x4&~x5&y1&~y2&~y3&~y4&~y5|~x1&x2&x3&~x4&x5&y1&~y2&~y3&~y4&~y5|~x1&
x2&x3&~x4&x5&y1&~y2&y3&~y4&y5|~x1&x2&x3&x4&~x5&y1&~y2&~y3&~y4&y5|~x1&x2&x3&x4&~x5&y1&~y2&y3&y4&~y5|~x1&x2&x3&x4&x5&y1&~y2&~y3&y4&~y5|~x1&x2&x3&
x4&x5&y1&~y2&y3&~y4&y5|x1&~x2&~x3&~x4&~x5&y1&~y2&y3&y4&y5|x1&~x2&~x3&~x4&~x5&y1&y2&~y3&~y4&y5|x1&~x2&~x3&~x4&x5&y1&~y2&~y3&y4&~y5|x1&~x2&~x3&~
x4&x5&y1&y2&~y3&~y4&y5|x1&~x2&~x3&x4&~x5&y1&~y2&y3&~y4&y5|x1&~x2&~x3&x4&~x5&y1&y2&~y3&y4&~y5|x1&~x2&~x3&x4&x5&y1&~y2&~y3&~y4&~y5|x1&~x2&~x3&x4&x5
&y1&y2&~y3&y4&y5|x1&~x2&x3&~x4&~x5&y1&~y2&y3&~y4&y5|x1&~x2&x3&~x4&~x5&y1&y2&y3&~y4&y5|x1&~x2&x3&~x4&x5&y1&~y2&~y3&~y4&~y5|x1&~x2&x3&~x4&x5&y1&y2
&y3&~y4&y5|x1&~x2&x3&x4&~x5&y1&y2&~y3&~y4&y5|x1&~x2&x3&x4&~x5&y1&y2&y3&y4&~y5|x1&~x2&x3&x4&x5&y1&y2&~y3&y4&~y5|x1&~x2&x3&x4&x5&y1&y2&y3&y4&y5|x
1&x2&~x3&~x4&~x5&~y1&~y2&~y3&~y4&~y5|x1&x2&~x3&~x4&~x5&y1&y2&~y3&y4&y5|x1&x2&~x3&~x4&x5&~y1&~y2&~y3&~y4&~y5|x1&x2&~x3&~x4&x5&y1&y2&~y3&~y4&~y5|x1
&x2&~x3&x4&~x5&~y1&~y2&~y3&y4&~y5|x1&x2&~x3&x4&~x5&y1&y2&y3&~y4&y5|x1&x2&~x3&x4&x5&~y1&~y2&~y3&y4&y5|x1&x2&~x3&x4&x5&y1&y2&y3&y4&~y5|x1&x2&x3&~
x4&~x5&~y1&~y2&y3&~y4&~y5|x1&x2&x3&~x4&~x5&y1&y2&y3&y4&y5|x1&x2&x3&~x4&x5&~y1&~y2&~y3&~y4&~y5|x1&x2&x3&~x4&x5&~y1&~y2&y3&~y4&y5|x1&x2&x3&x4&~x5
&~y1&~y2&~y3&~y4&y5|x1&x2&x3&x4&~x5&~y1&~y2&y3&y4&~y5|x1&x2&x3&x4&~x5&~y1&~y2&~y3&y4&~y5|x1&x2&x3&x4&x5&~y1&~y2&y3&y4&y5

prime boolean formula:   ~x1&~x2&~x3&x4&x5|~x1&~x2&x3&~x4&x5|~x1&x2&~x3&x4&x5|~x1&x2&x3&~x4&x5|x1&~x2&~x3&~x4&x5|x1&~x2&~x3&x4
&x5|x1&~x2&x3&x4&x5|x1&x2&x3&~x4&x5|x1&x2&x3&x4&x5

even boolean formula:    ~y1&~y2&~y3&~y4&~y5|~y1&~y2&~y3&y4&~y5|~y1&~y2&y3&~y4&~y5|~y1&~y2&y3&y4&~y5|~y1&y2&~y3&~y4&~y5|~y1&y2&~y3&y4&~y5|~y1&y
2&y3&~y4&~y5|~y1&y2&y3&y4&~y5|y1&~y2&~y3&~y4&~y5|y1&~y2&~y3&y4&~y5|y1&~y2&y3&~y4&~y5|y1&~y2&y3&y4&~y5|y1&y2&~y3&~y4&~y5|y1&y2&~y3&y4&~y5|y1&y2&
y3&~y4&~y5|y1&y2&y3&y4&~y5

============================================ Testcases 3.1 for BDDs ============================================
RR(27, 3) is:    True
RR(16, 20) is:   False
EVEN(14) is:     True
EVEN(13) is:     False
PRIME(7) is:     True
PRIME(2) is:     False

============================================ Testcases 3.2 for RR2 ============================================
RR2(27, 6) is:   True
RR2(27, 9) is:   False

============================================ Verifying Statement A ============================================
Statement A is: True

C:\Users\boxiang\Desktop\350-BDD-project (b1)
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