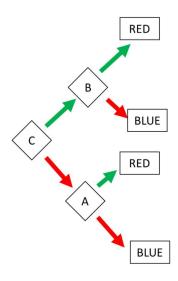
C3-S8 PRACTICE

Flowchart to Boolean expression

Example

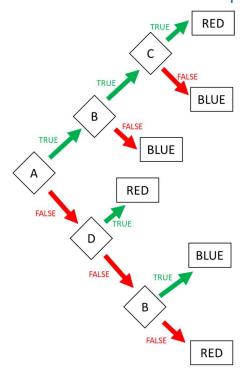


Answer:

RED = (C and B) or (!C and A)

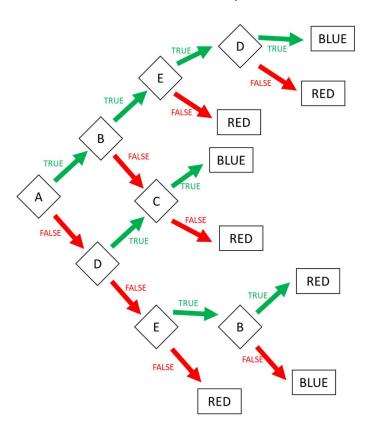
BLUE = (C and !B) or (!C and !A)

Ex 1: Find the Boolean expression of BLUE



BLUE = (A and !B) or (A and B and !C) or !A and !D and B

Ex 2: Find the Boolean expression of BLUE

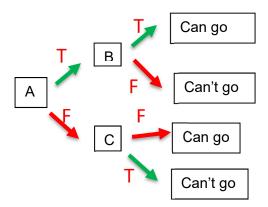


 $BLUE = (A \ and \ B \ and \ E \ and \ D) \ or \ (A \ and \ B \ and \ C) \ or \ (A \ and \ B) \ or \ (A \ and \ B) \ and \ E$

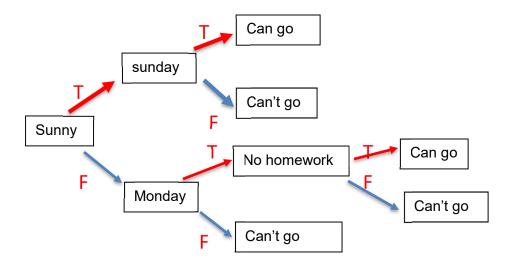
Ex 2: Create the flowchart according to the expressions (4 flowcharts):

- 1. Go to the market = AB or !A!C
- 2. Go to swim = (Sunny AND Sunday) OR (!(Sunny) and Monday and no homework)
- 3. I'm superman = A!BCD or AB!CD or !ABCD
- 4. Happy = ABC!DE!F or A!BCD!EF or !ABCD!E or !A!BC

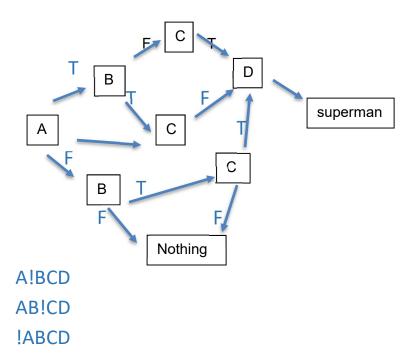
1. Go to the market



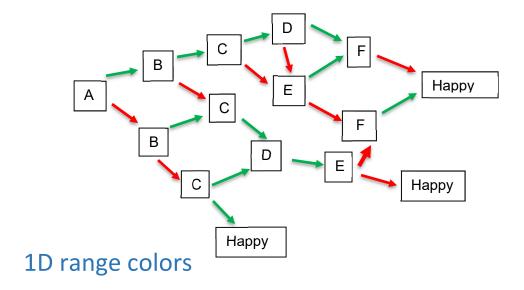
2. Go to swim = (Sunny AND Sunday) OR (!(Sunny) and Monday and no homework)



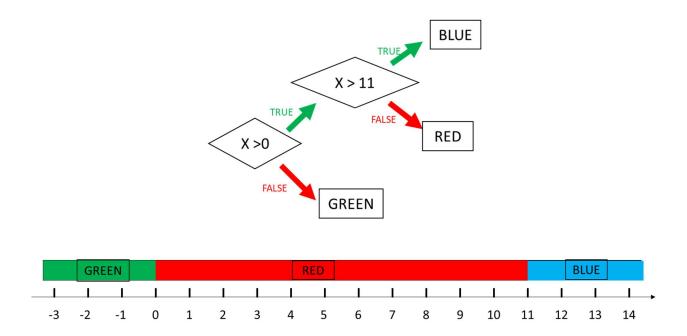
3. I'm superman = A!BCD or AB!CD or !ABCD



4. Happy = ABC!DE!F or A!BCD!EF or !ABCD!E or !A!BC

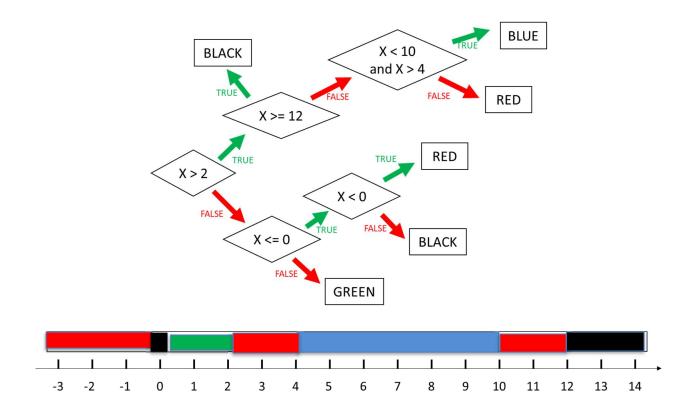


Example:



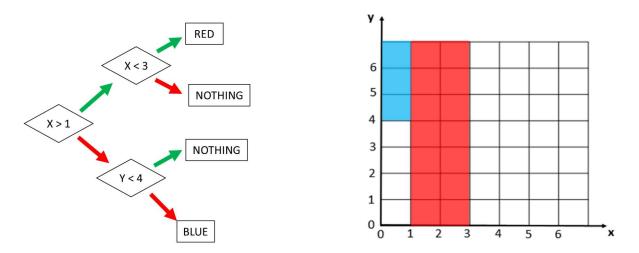
Ex 3: Ranges (1) BLUE X > 10 BLUE TRUE FALSE X < 6 FALSE . X >= 0 RED BLACK TRUE X > -2 FALSE RED -2 -1 1 6 9 10 11 12 13 -3 0 2 4 5 7 8 3 14

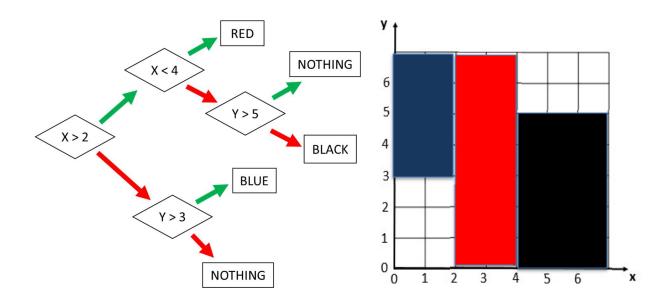
Ex 4: Ranges (2)



2D range colors

Example:





Ex 6: Square (2)

