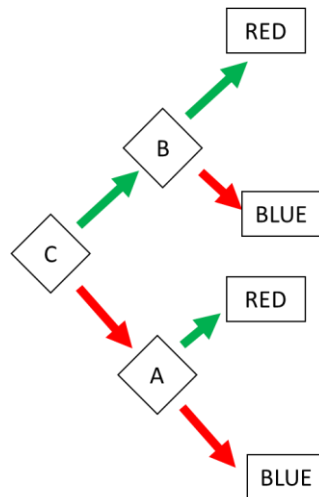


C3- S8 PRACTICE

Flowchart to Boolean expression

Example

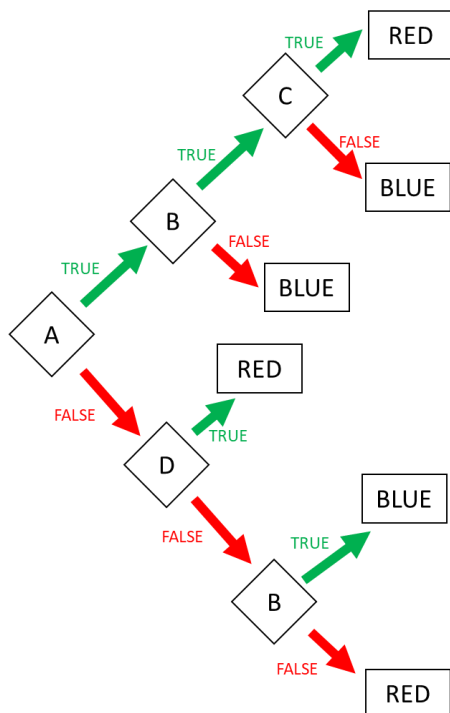


Answer:

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

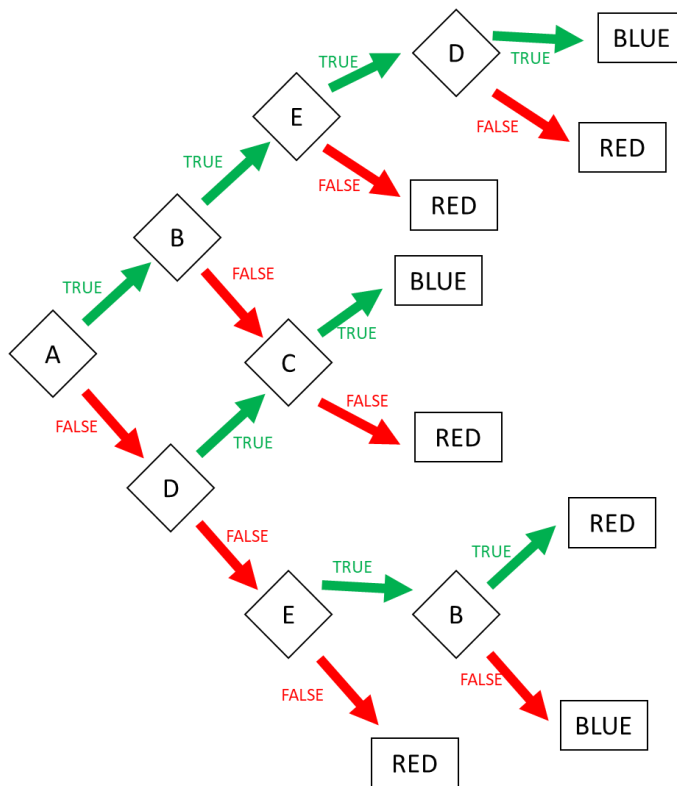
BLUE = (C and !B) or (!C and !A)

Ex 1: Find the Boolean expression of BLUE



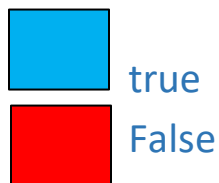
BLUE = (A and B and !C) or (A and !B) or (!A and !D and B)
= (AB!C or A!B or !A!DB)

Ex 2: Find the Boolean expression of BLUE



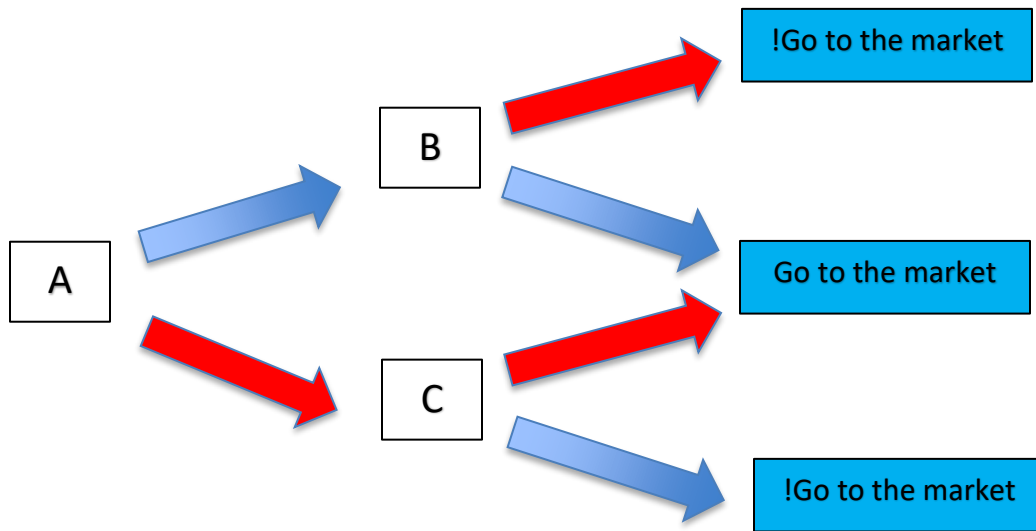
BLUE = (A and B and E and D) or (A and !B and C) or (!A and !B and E and !D)
 = ABED or !A!BE!D or A!BC

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

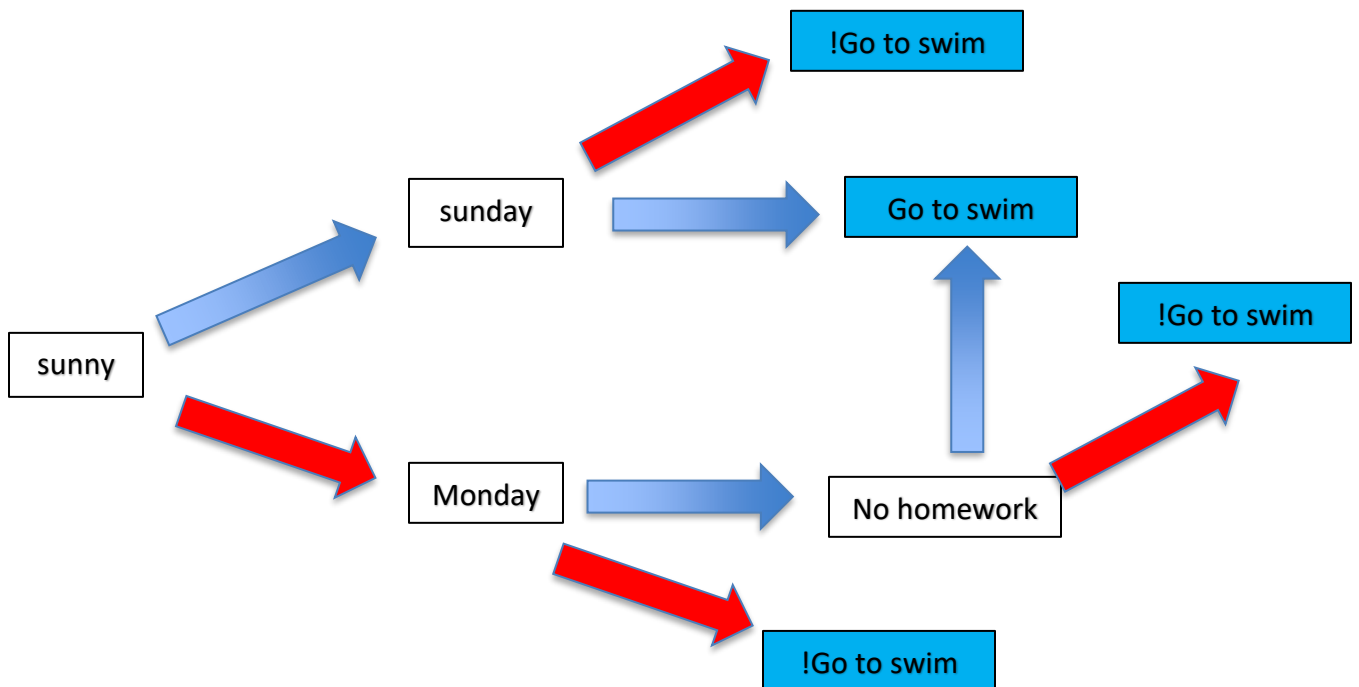


Answer

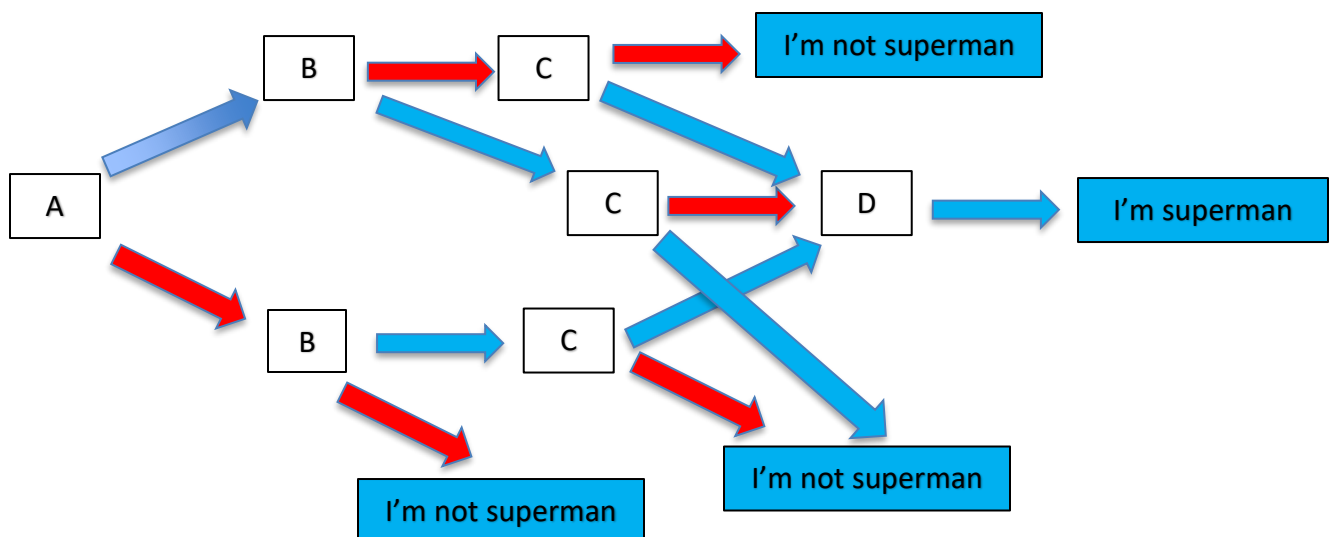
1. Go to the market = AB or !A!C



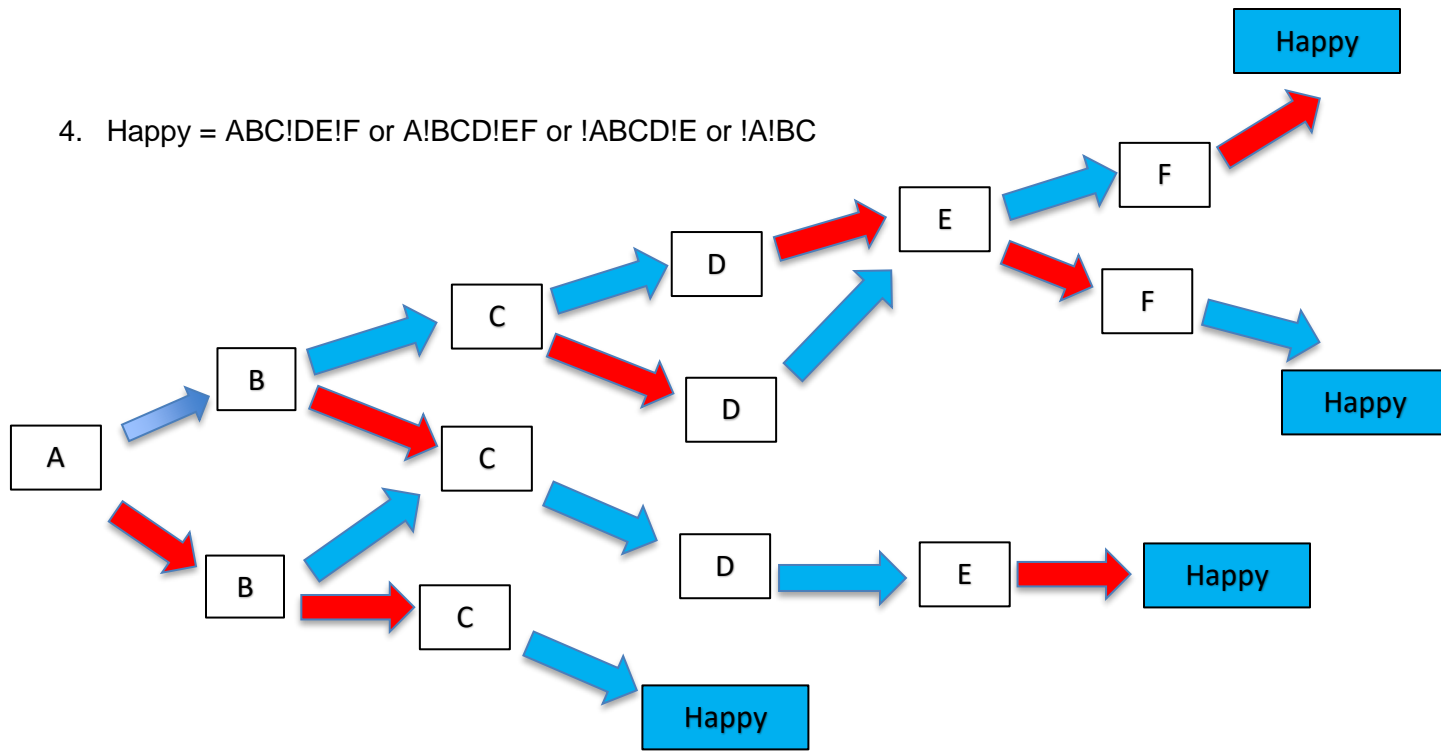
2. Go to swim = (Sunny AND Sunday) OR (!(Sunny) and Monday and no homework)



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

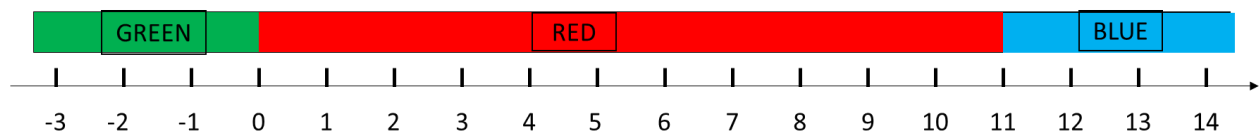
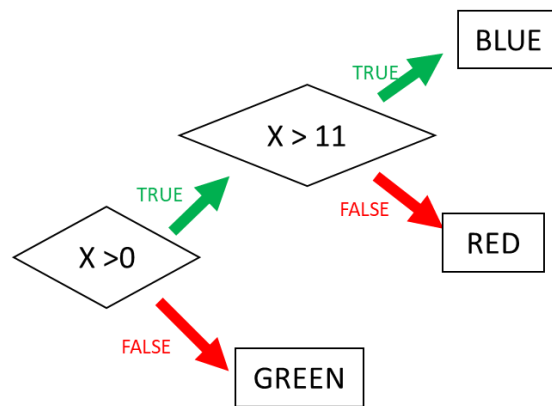


4. Happy = ABC!DE!F or A!BCD!EF or !ABCD!E or !A!BC

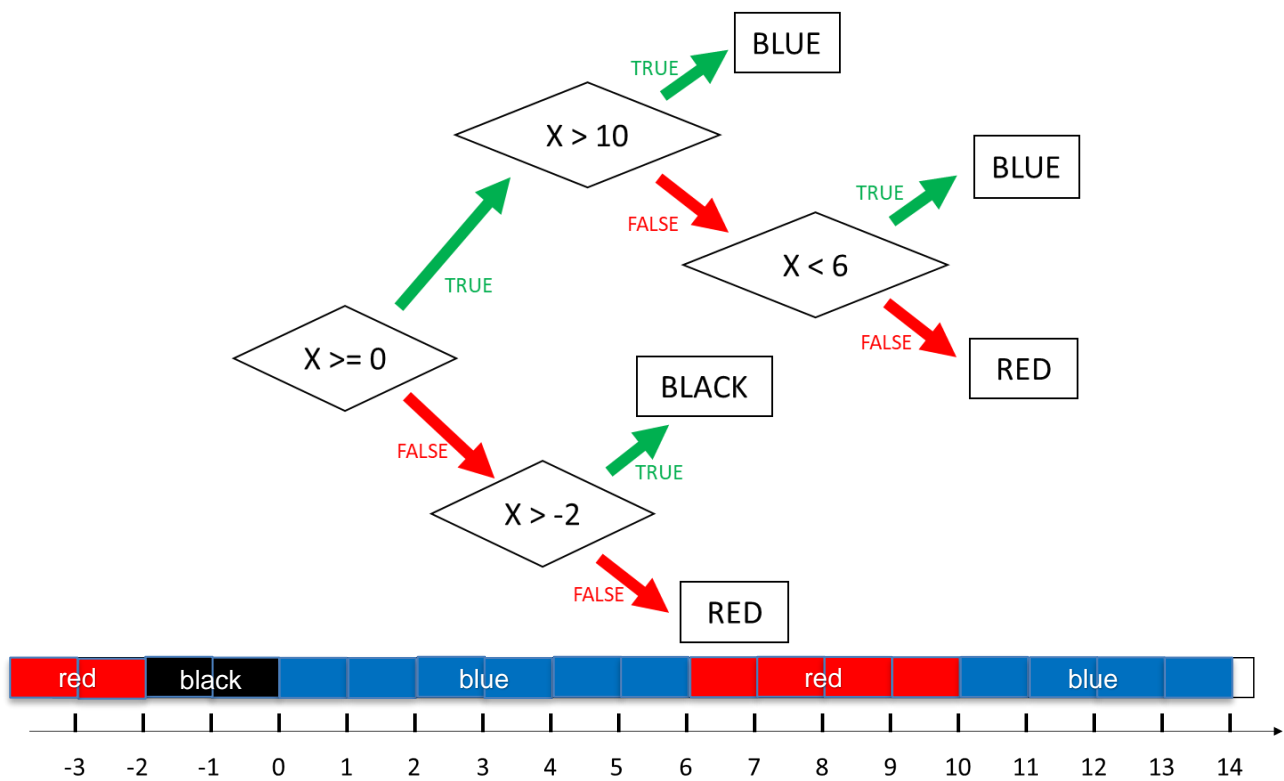


1D range colors

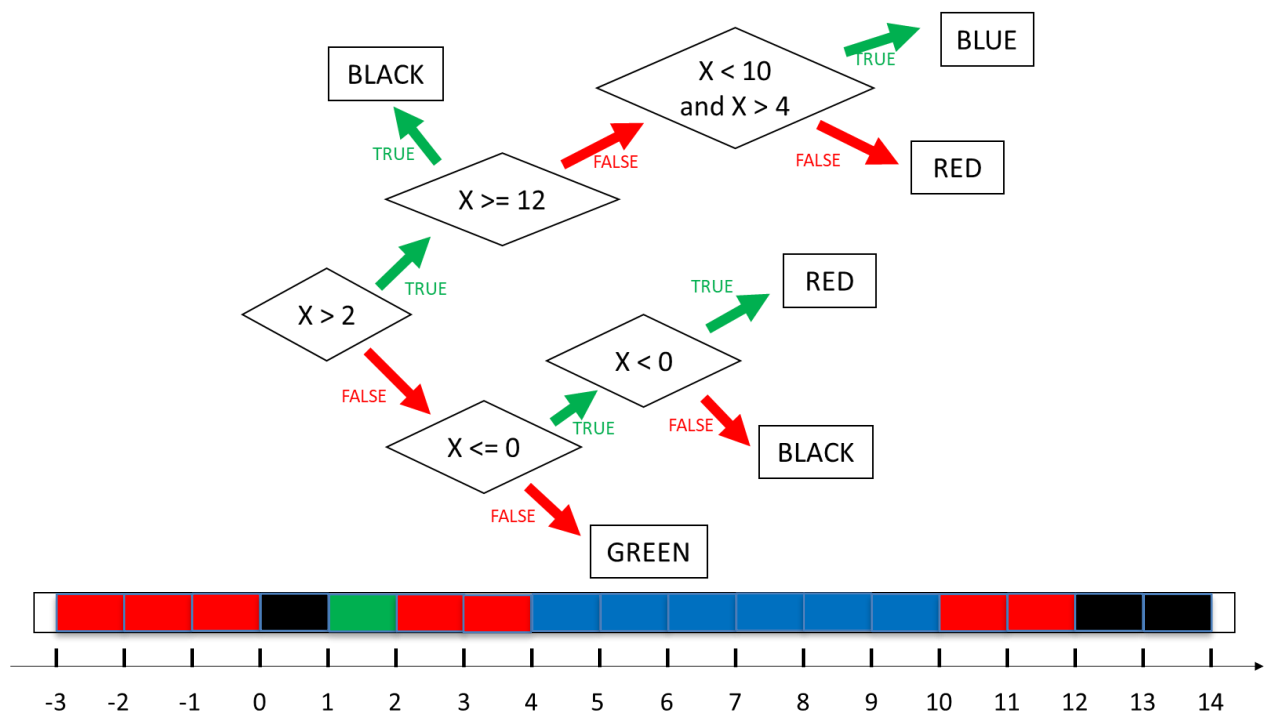
Example:



Ex 3: Ranges (1)

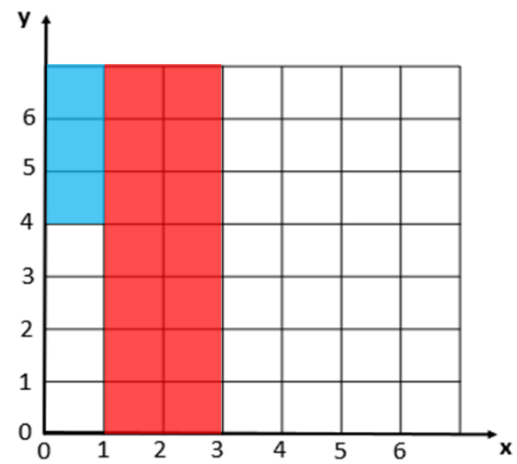
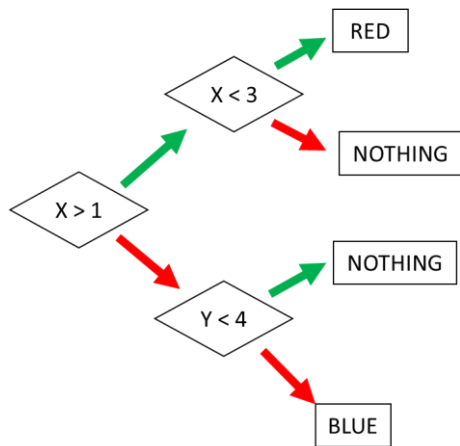


Ex 4: Ranges (2)

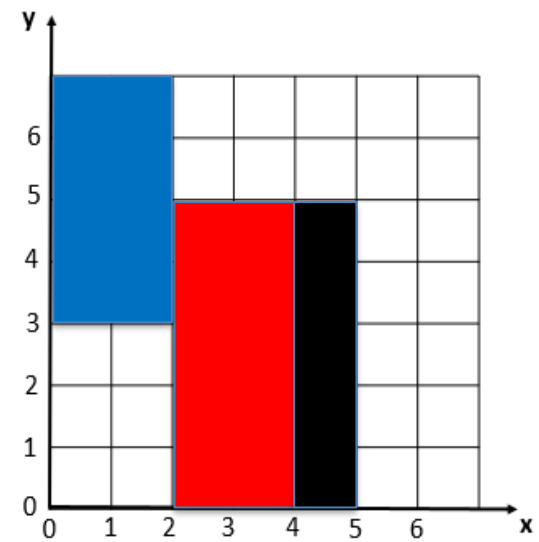
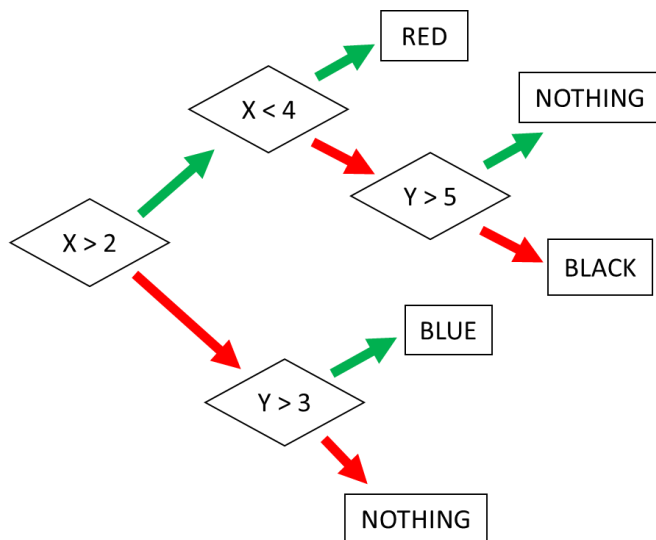


2D range colors

Example:



Ex 5: Square (1)



Ex 6: Square (2)

