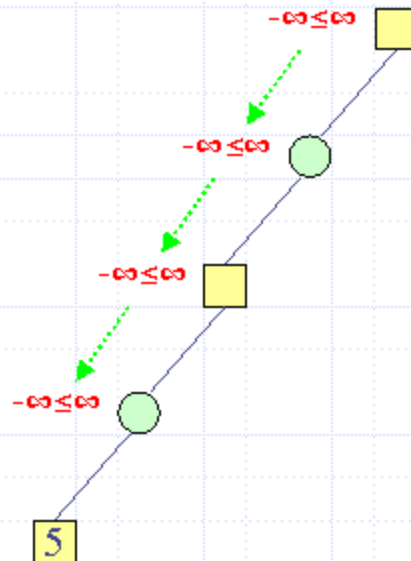


# Alpha-Beta Pruning

## Alpha-beta pruning example: Step 1

$\alpha$  is the maximum lower bound of possible solutions (MAX plays)

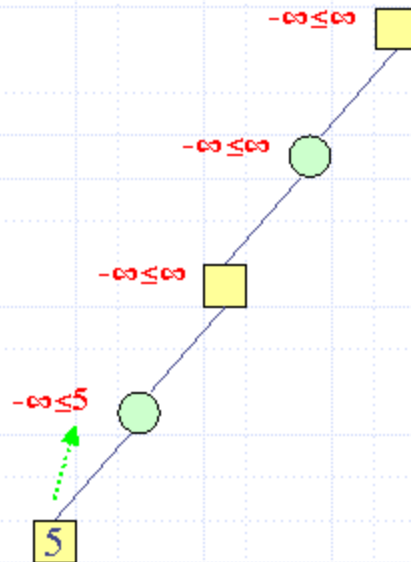
$\beta$  is the minimum upper bound of possible solutions (MIN plays)



## Alpha-beta pruning example: Step 2

$\alpha$  is the maximum lower bound of possible solutions (MAX plays)

$\beta$  is the minimum upper bound of possible solutions (MIN plays)

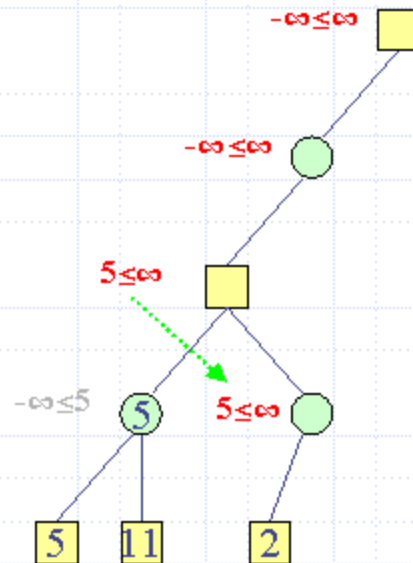




## Alpha-beta pruning example: Step 4

$\alpha$  is the maximum lower bound of possible solutions (MAX plays)

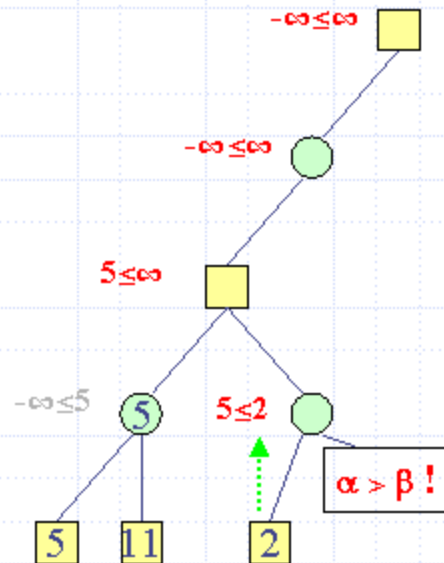
$\beta$  is the minimum upper bound of possible solutions (MIN plays)



## Alpha-beta pruning example: Step 5

$\alpha$  is the maximum lower bound of possible solutions (MAX plays)

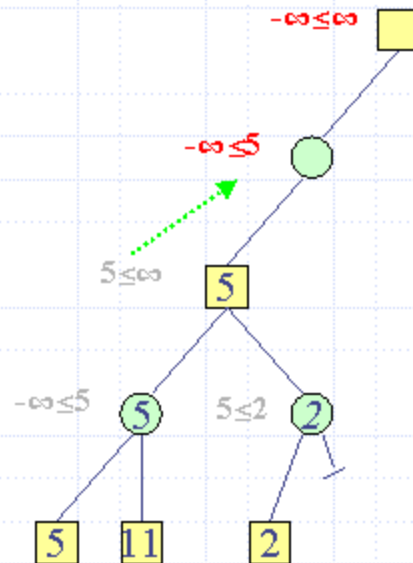
$\beta$  is the minimum upper bound of possible solutions (MIN plays)



## Alpha-beta pruning example: Step 6

$\alpha$  is the maximum lower bound of possible solutions (MAX plays)

$\beta$  is the minimum upper bound of possible solutions (MIN plays)

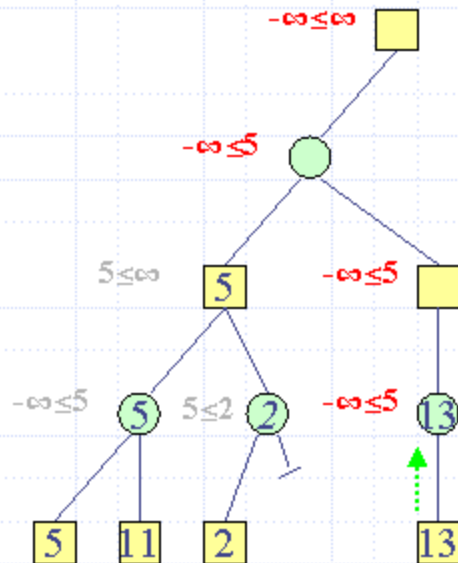




## Alpha-beta pruning example: Step 8

$\alpha$  is the maximum lower bound of possible solutions (MAX plays)

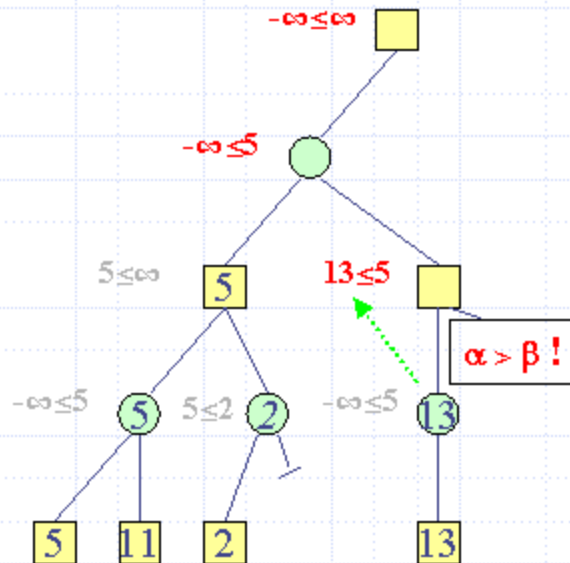
$\beta$  is the minimum upper bound of possible solutions (MIN plays)



## Alpha-beta pruning example: Step 9

$\alpha$  is the maximum lower bound of possible solutions (MAX plays)

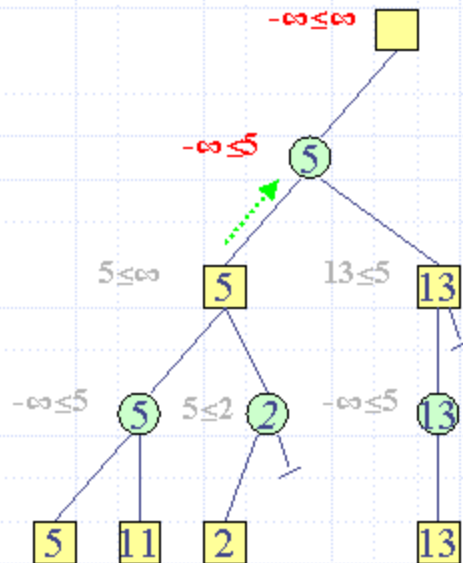
$\beta$  is the minimum upper bound of possible solutions (MIN plays)



## Alpha-beta pruning example: Step 10

$\alpha$  is the maximum lower bound of possible solutions (MAX plays)

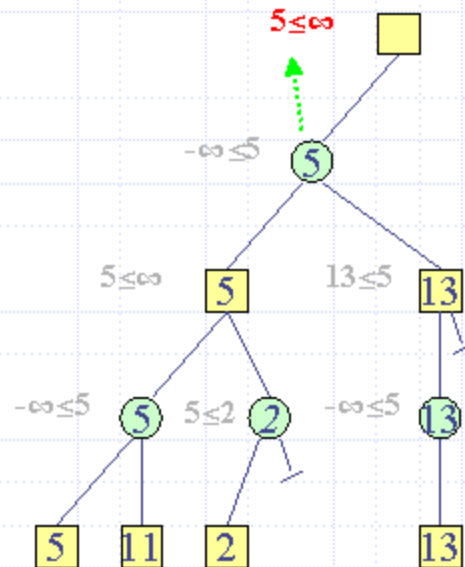
$\beta$  is the minimum upper bound of possible solutions (MIN plays)



## Alpha-beta pruning example: Step 11

$\alpha$  is the maximum lower bound of possible solutions (MAX plays)

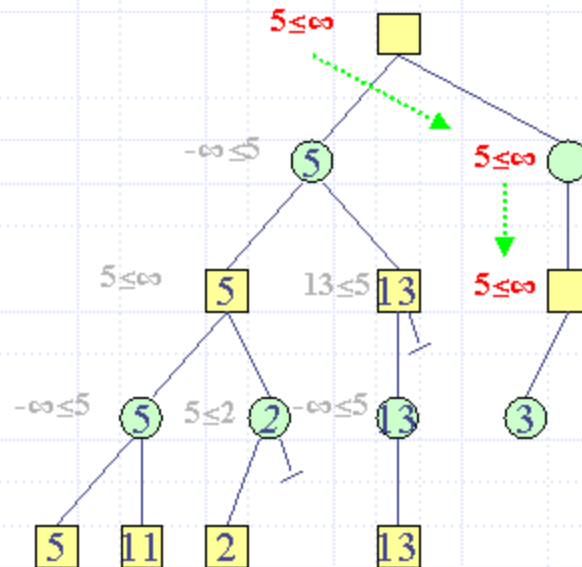
$\beta$  is the minimum upper bound of possible solutions (MIN plays)



## Alpha-beta pruning example: Step 12

$\alpha$  is the maximum lower bound of possible solutions (MAX plays)

$\beta$  is the minimum upper bound of possible solutions (MIN plays)





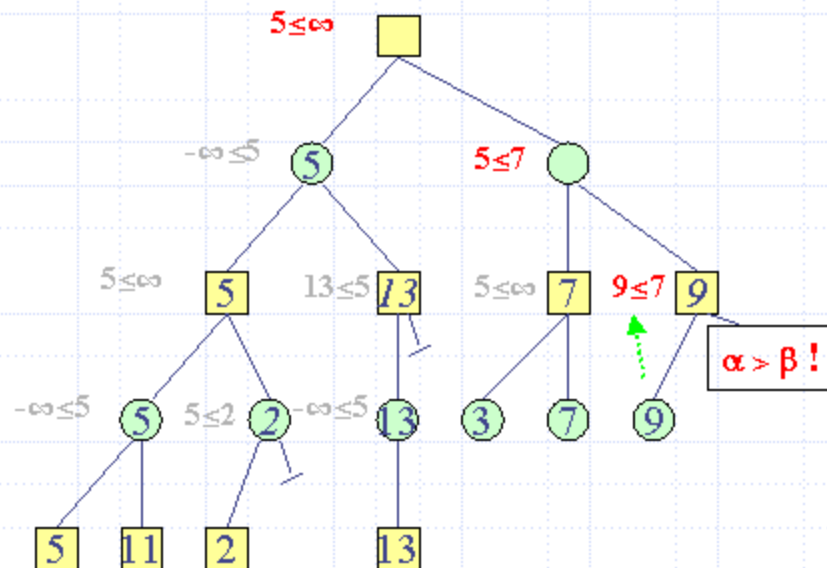




## Alpha-beta pruning example: Step 16

$\alpha$  is the maximum lower bound of possible solutions (MAX plays)

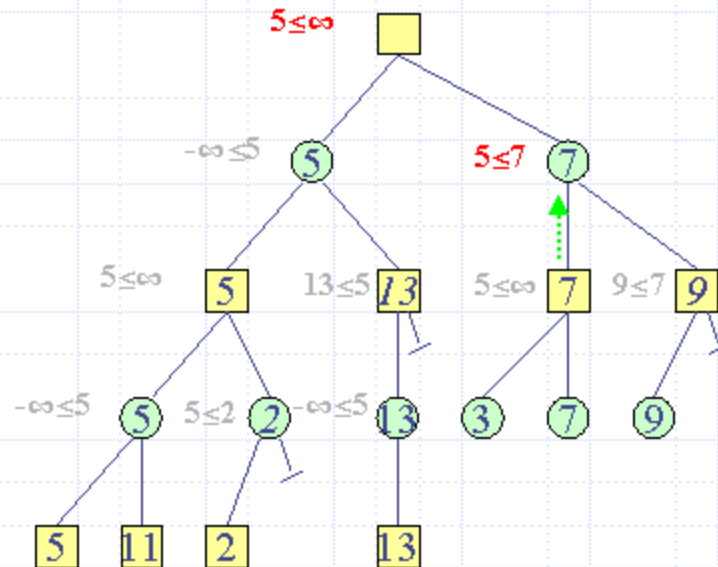
$\beta$  is the minimum upper bound of possible solutions (MIN plays)



## Alpha-beta pruning example: Step 17

$\alpha$  is the maximum lower bound of possible solutions (MAX plays)

$\beta$  is the minimum upper bound of possible solutions (MIN plays)



## Alpha-beta pruning example: Step 18

$\alpha$  is the maximum lower bound of possible solutions (MAX plays)

$\beta$  is the minimum upper bound of possible solutions (MIN plays)

