

فصل ششم

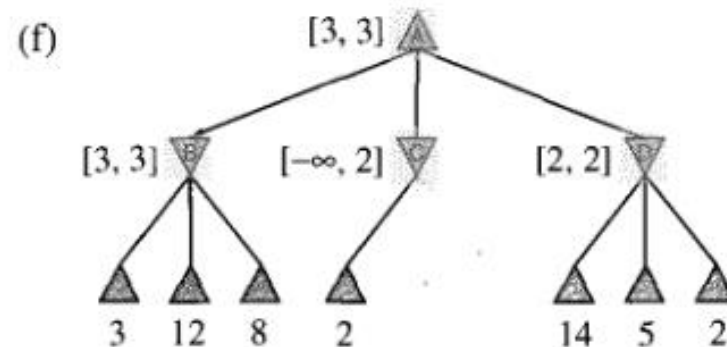
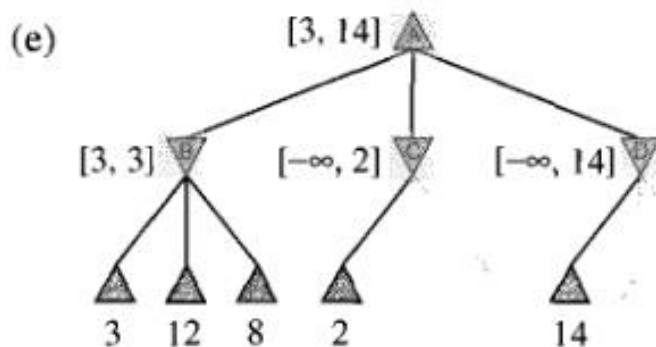
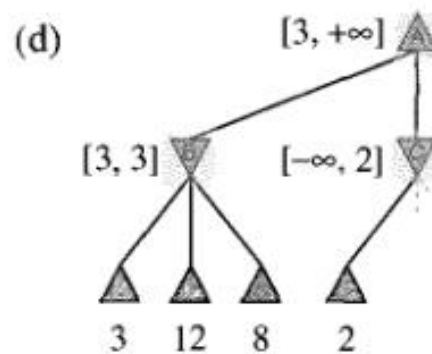
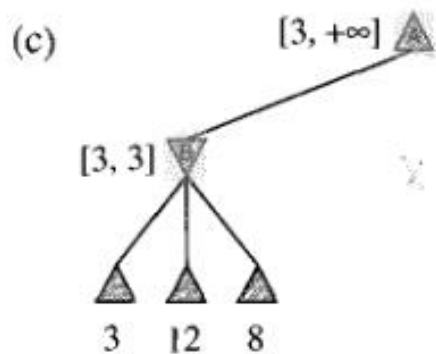
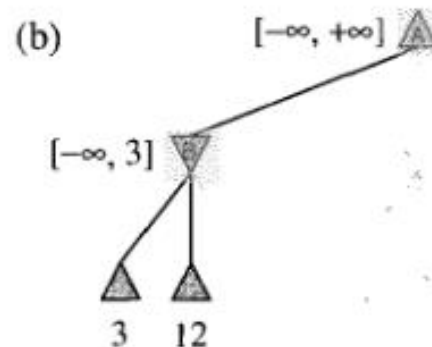
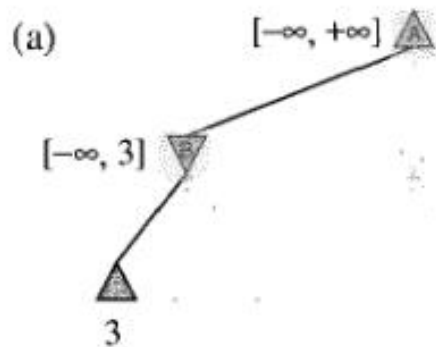
جستجوی رقابتی

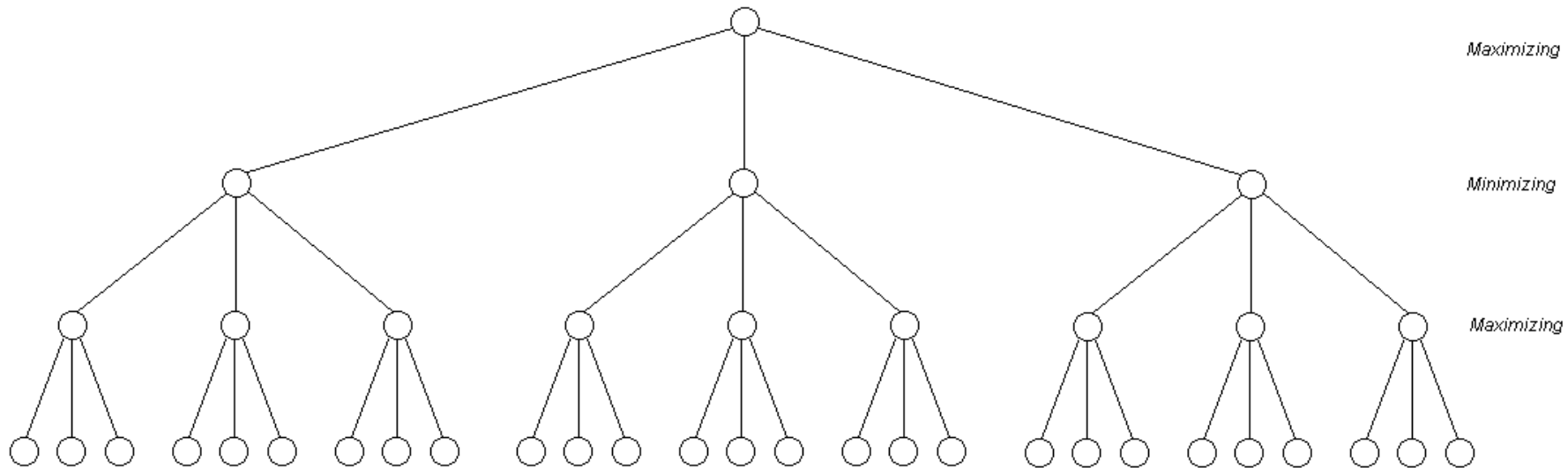
مثال هایی از هرس آلفابتا

محمد حسین خسروی

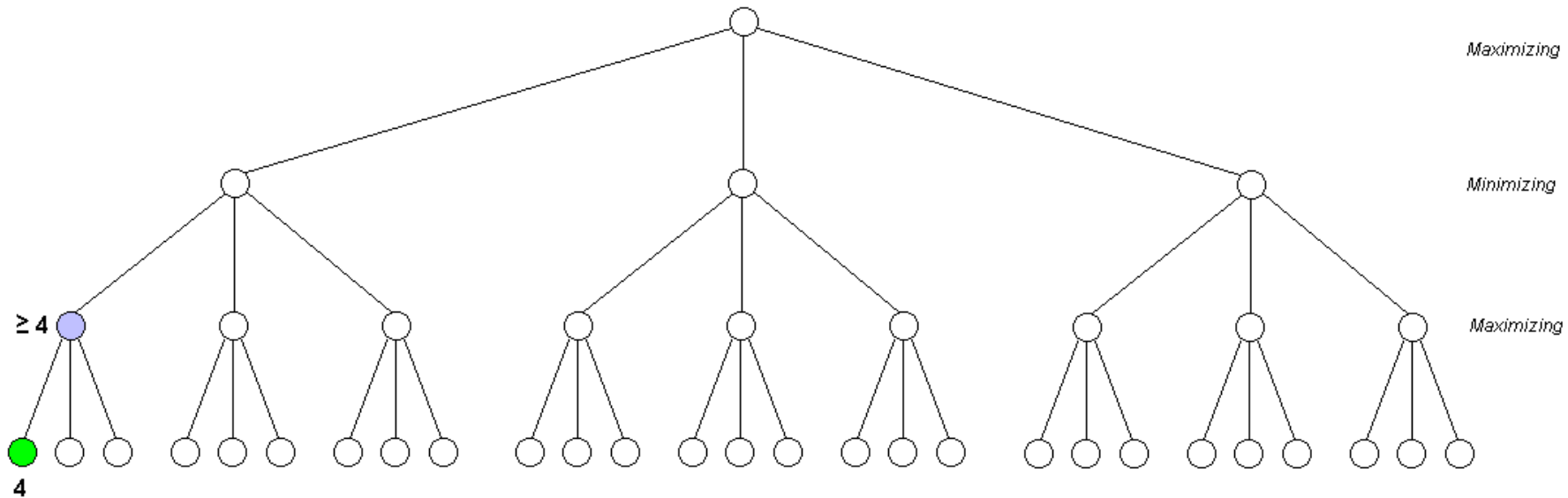
دانشکده مهندسی، دانشگاه بیرجند

هرس کردن آلفابتا - مثال ۱

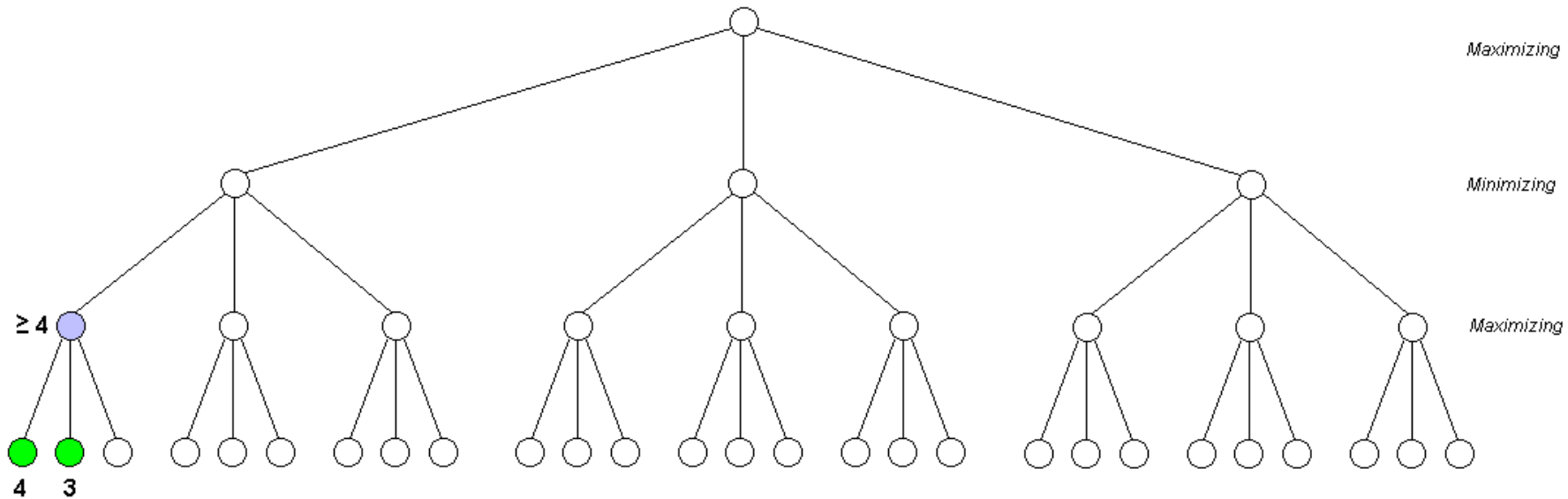


هرس کردن α - β : مثال ۲

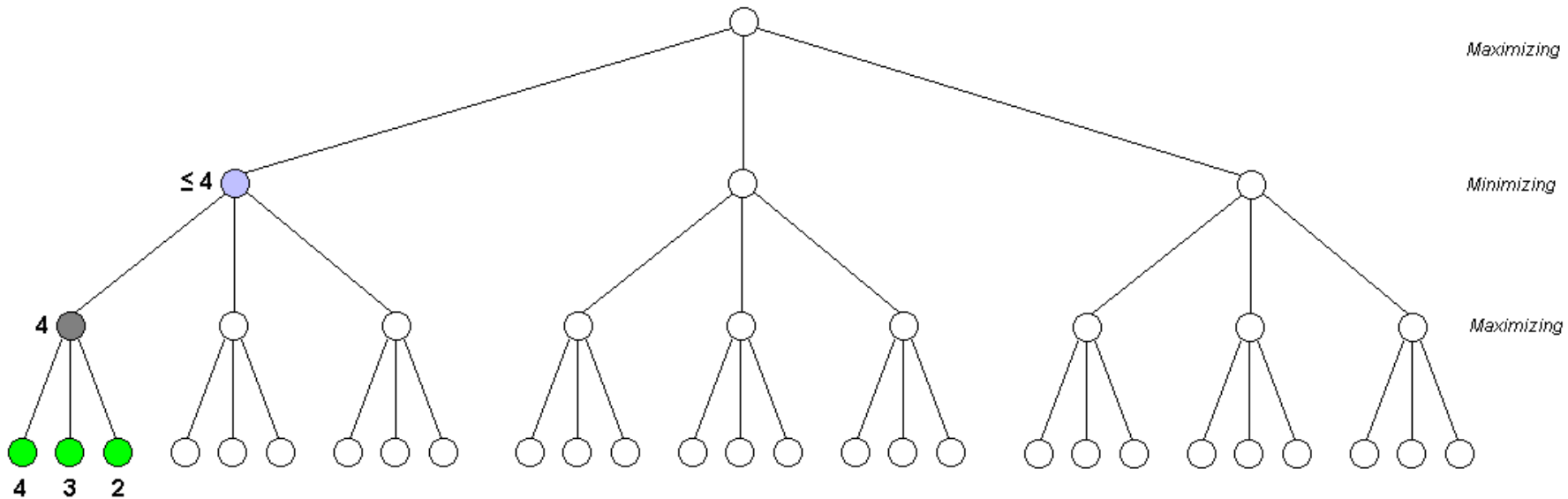
هرس کردن α - β : مثال ۲



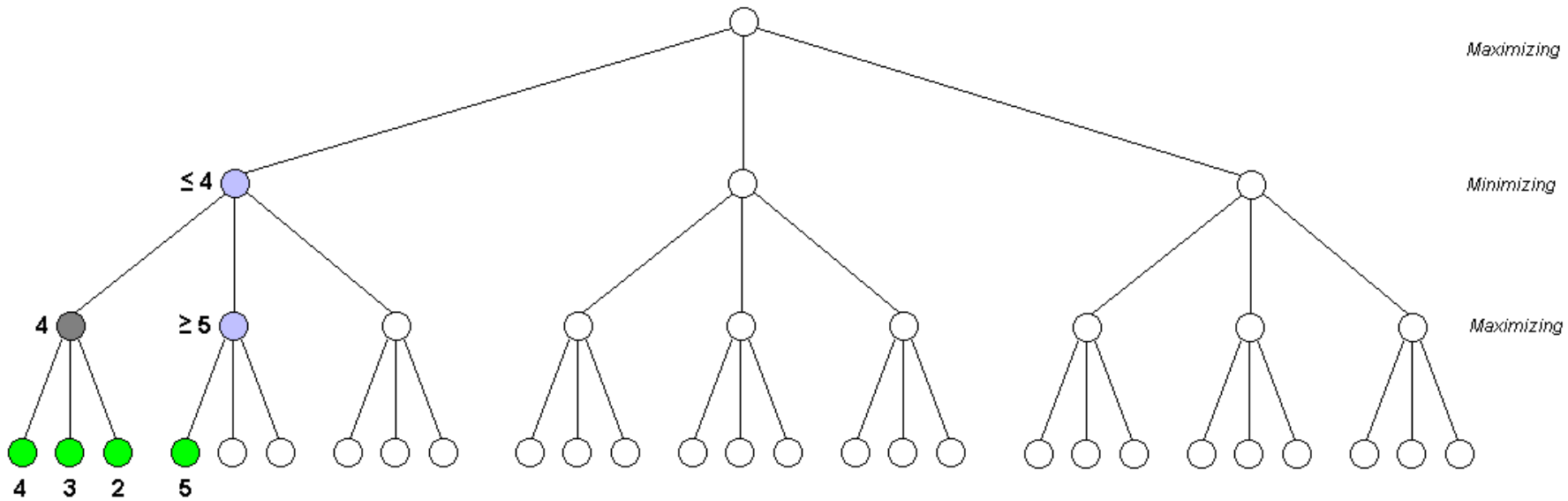
هرس کردن α - β : مثال ۲



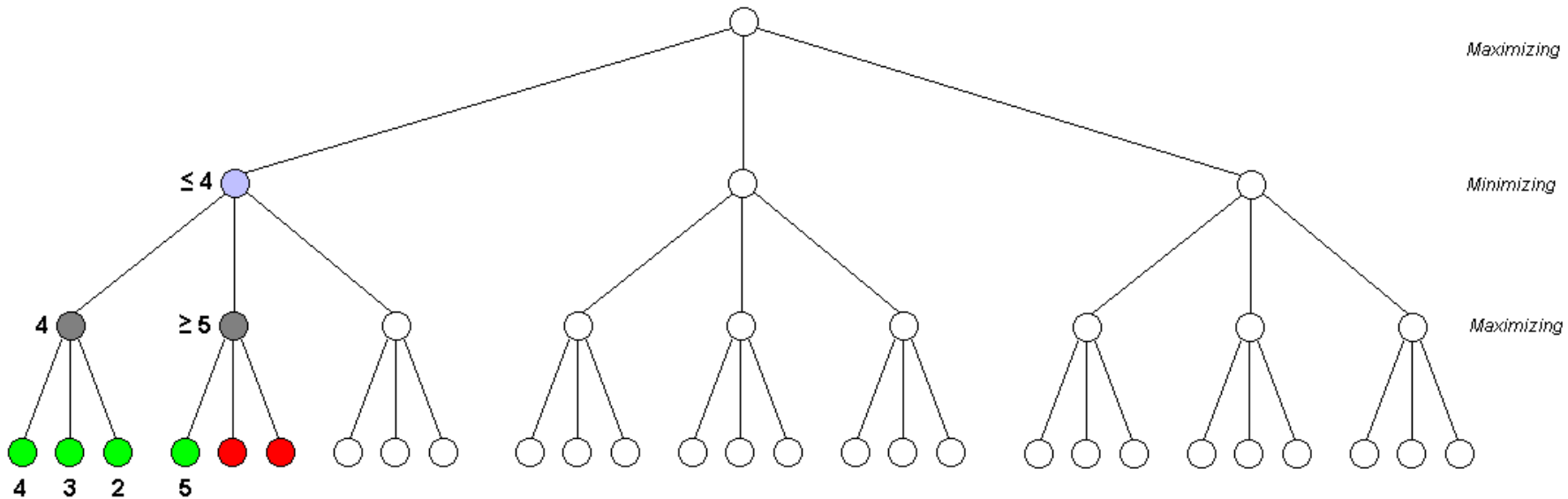
هرس کردن α - β : مثال ۲



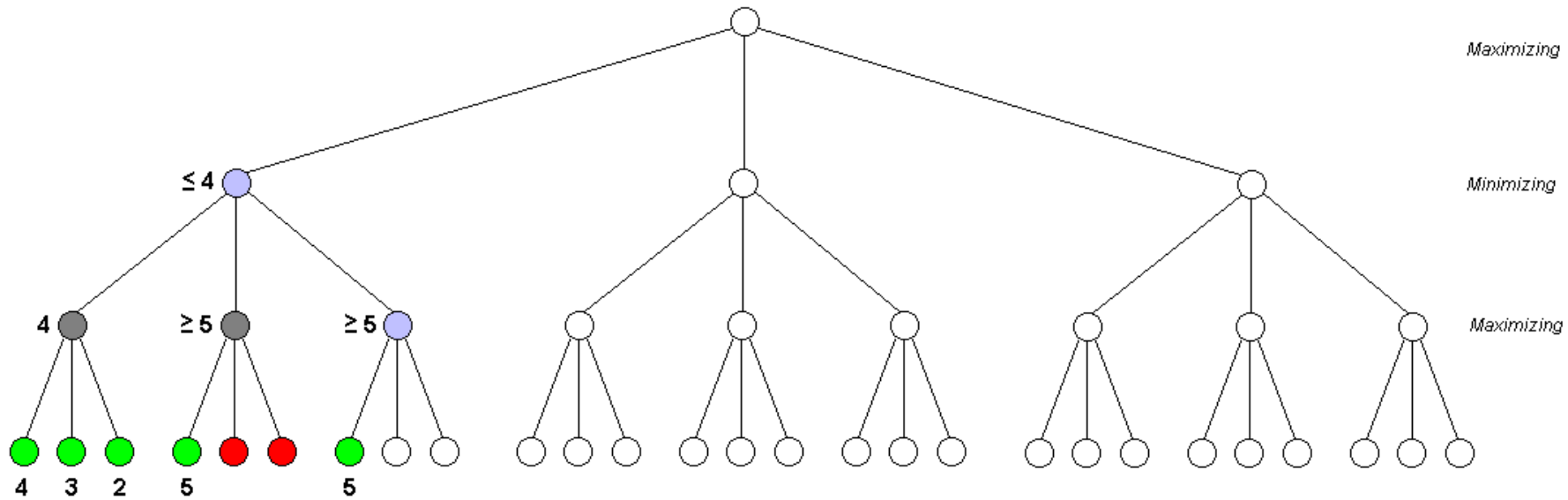
هرس کردن α - β : مثال ۲



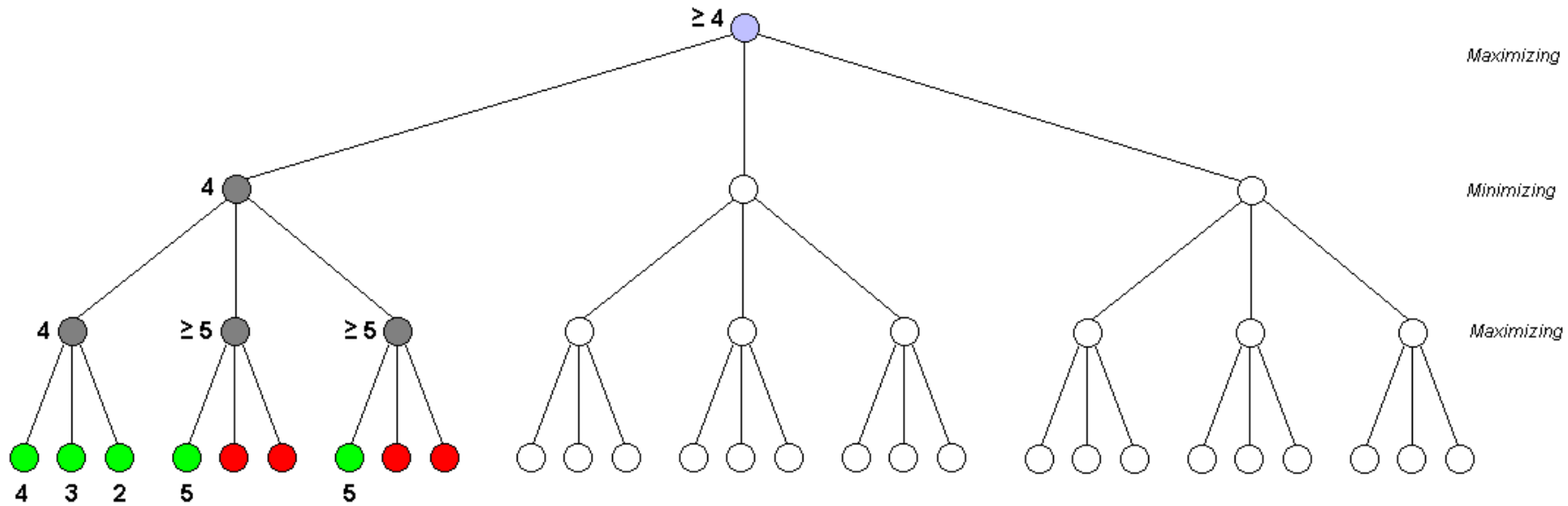
هرس کردن α - β : مثال ۲



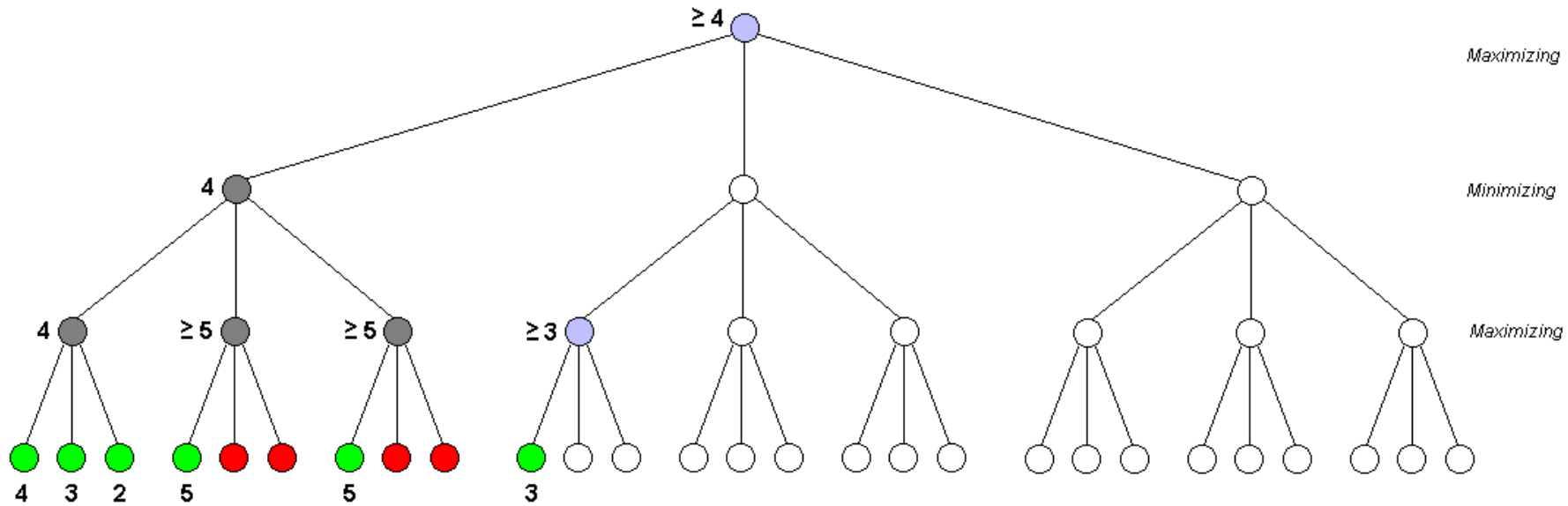
هرس کردن α - β : مثال ۲



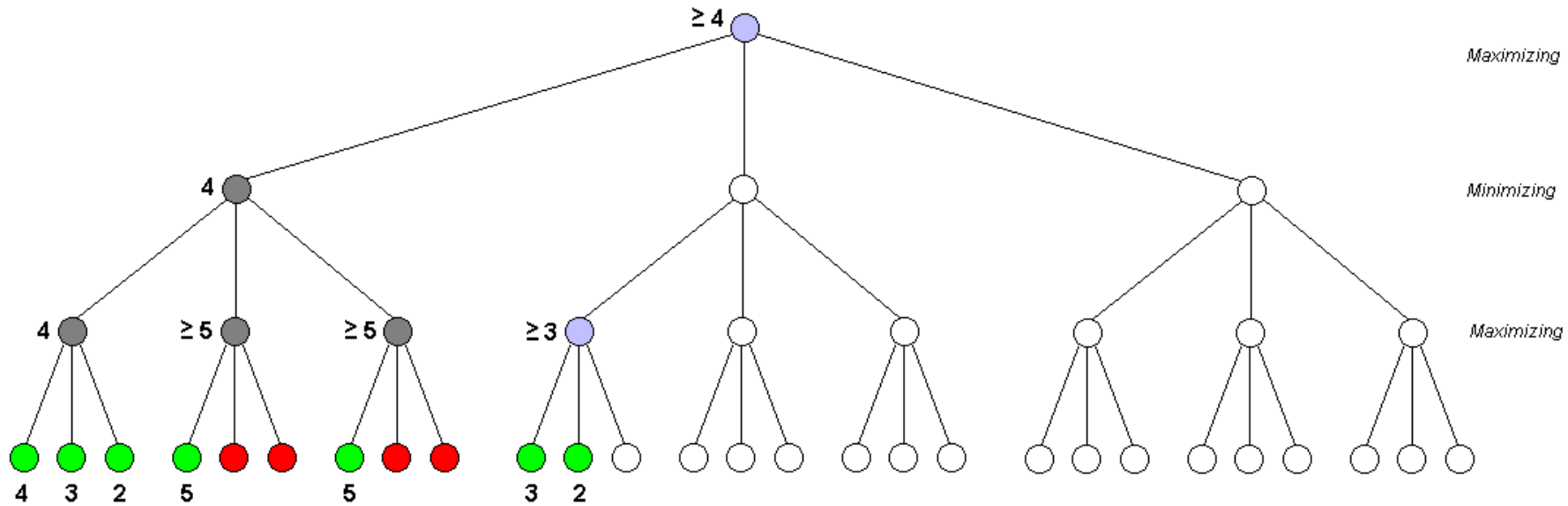
هرس کردن α - β : مثال ۲



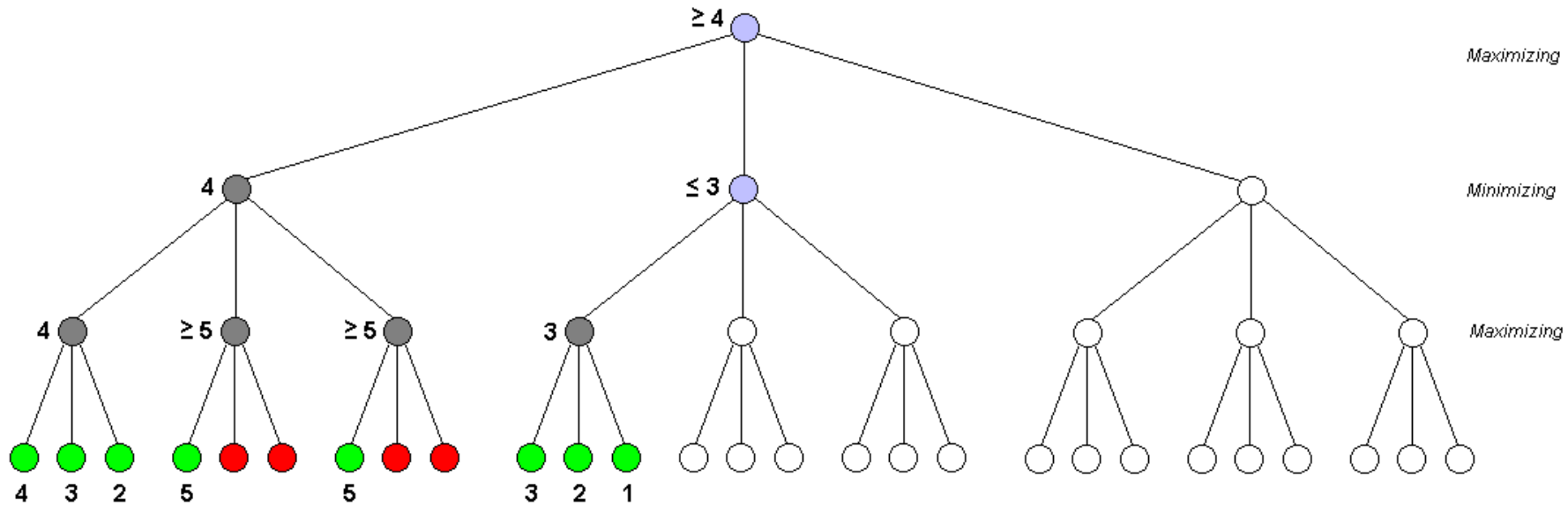
هرس کردن α - β : مثال ۲



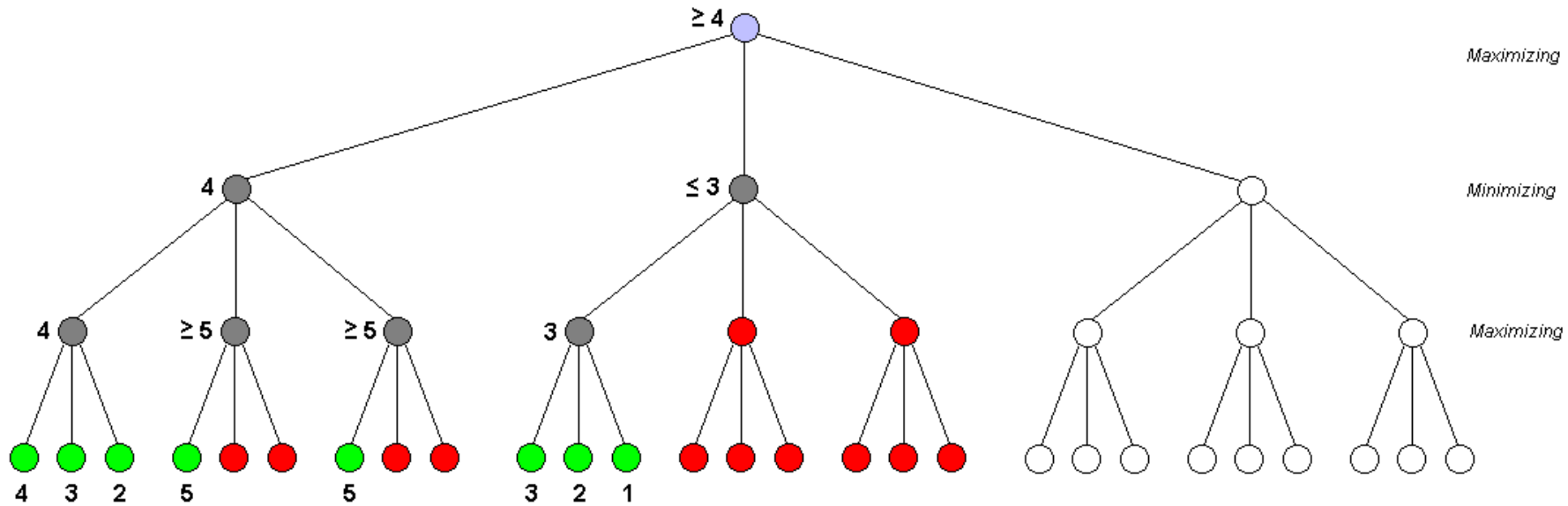
هرس کردن α - β : مثال ۲



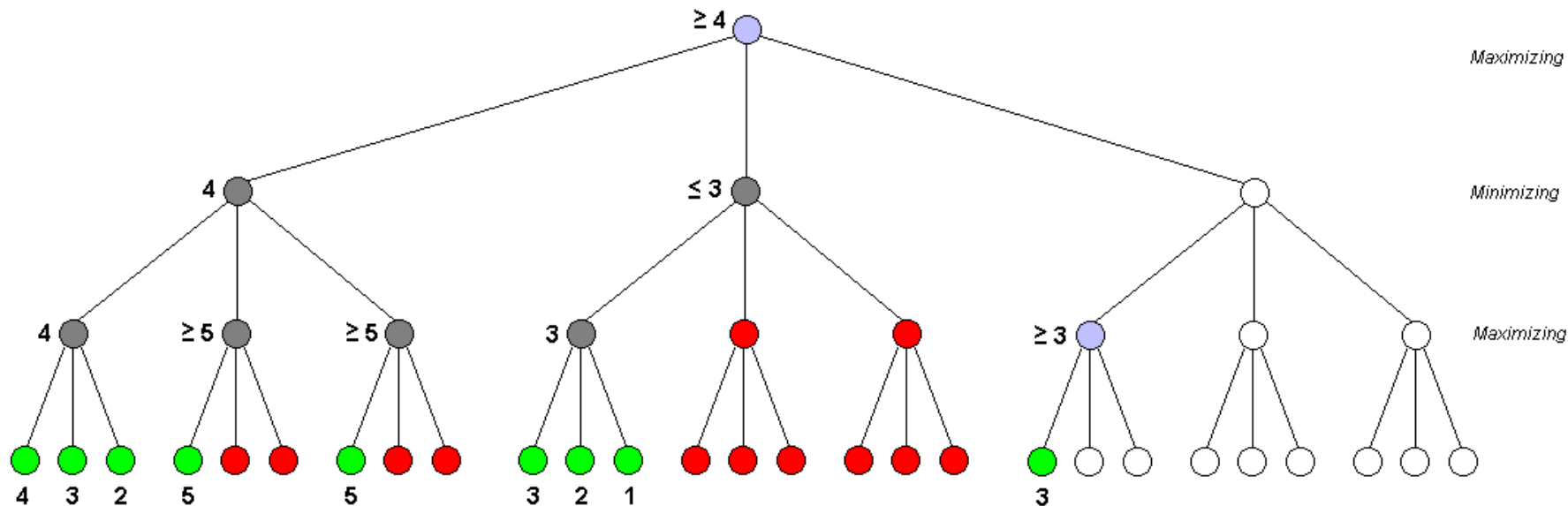
هرس کردن α - β : مثال ۲



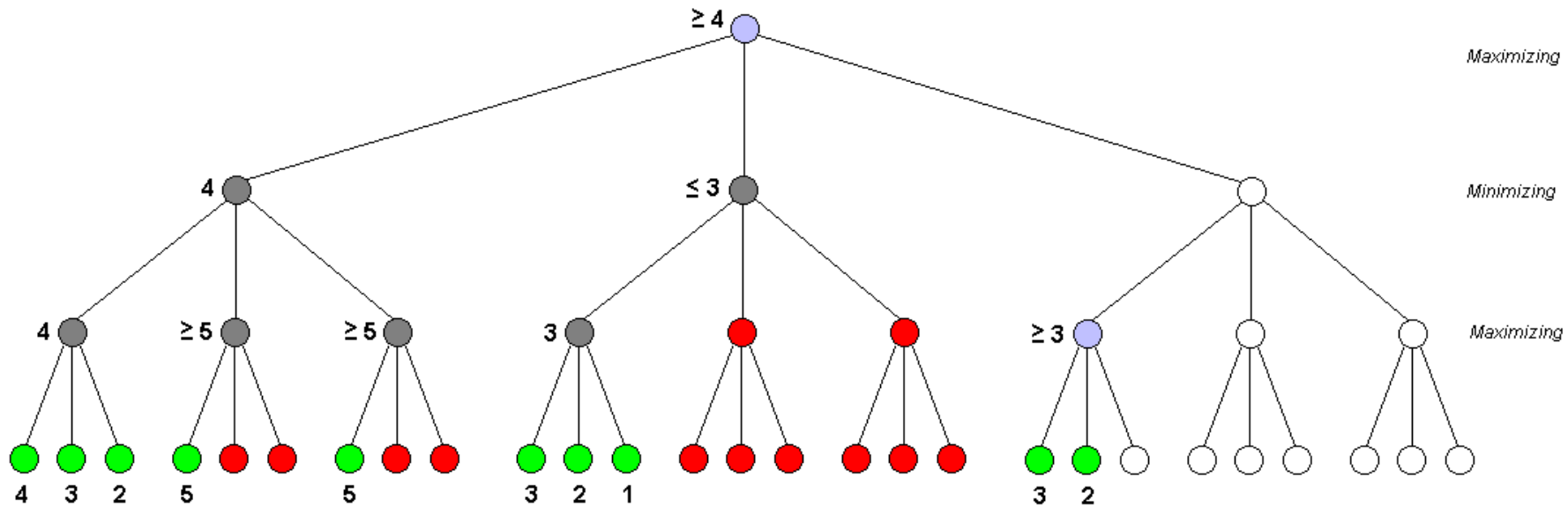
هرس کردن α - β : مثال ۲



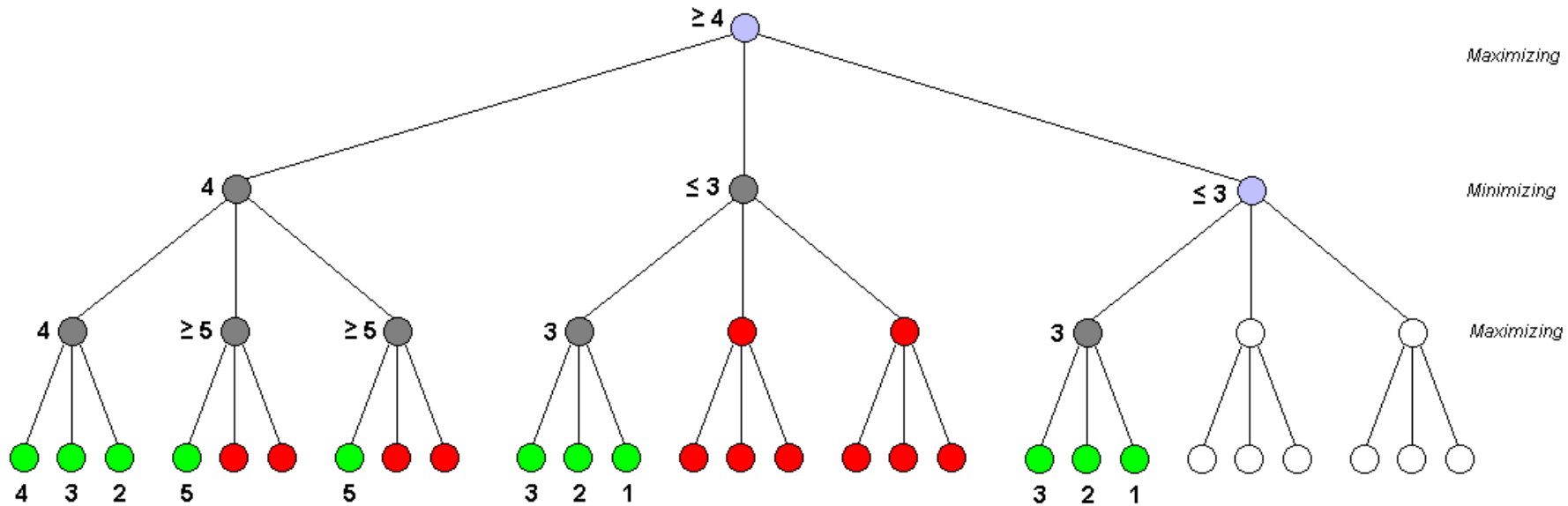
هرس کردن α - β : مثال ۲



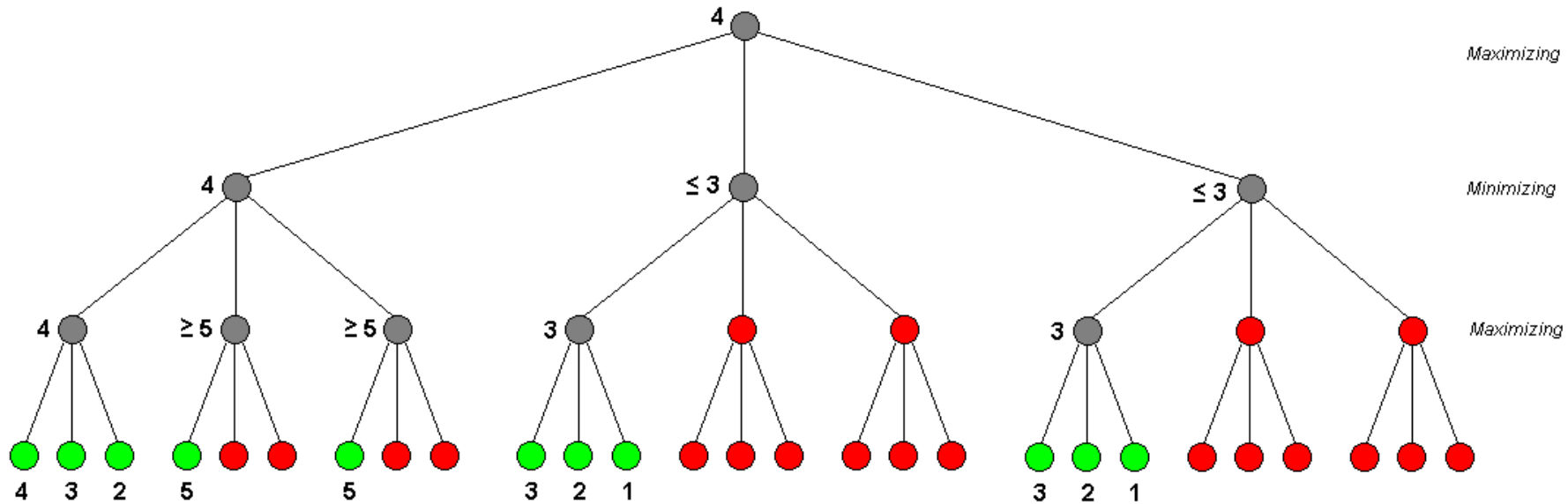
هرس کردن α - β : مثال ۲



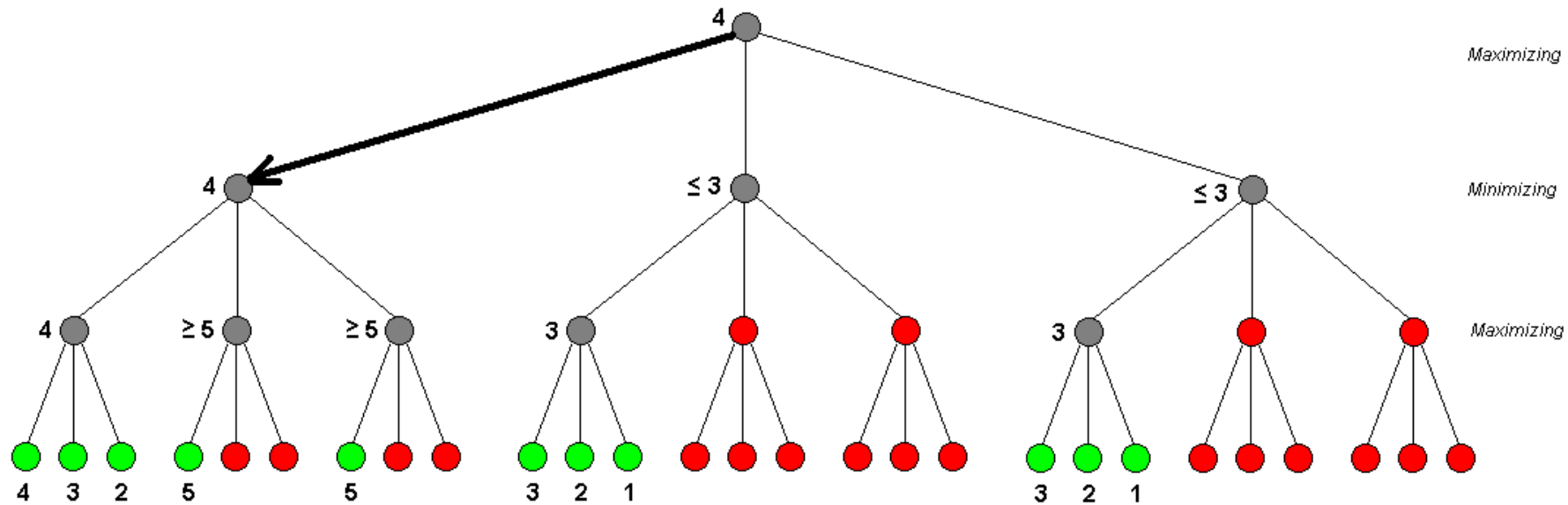
هرس کردن α - β : مثال ۲

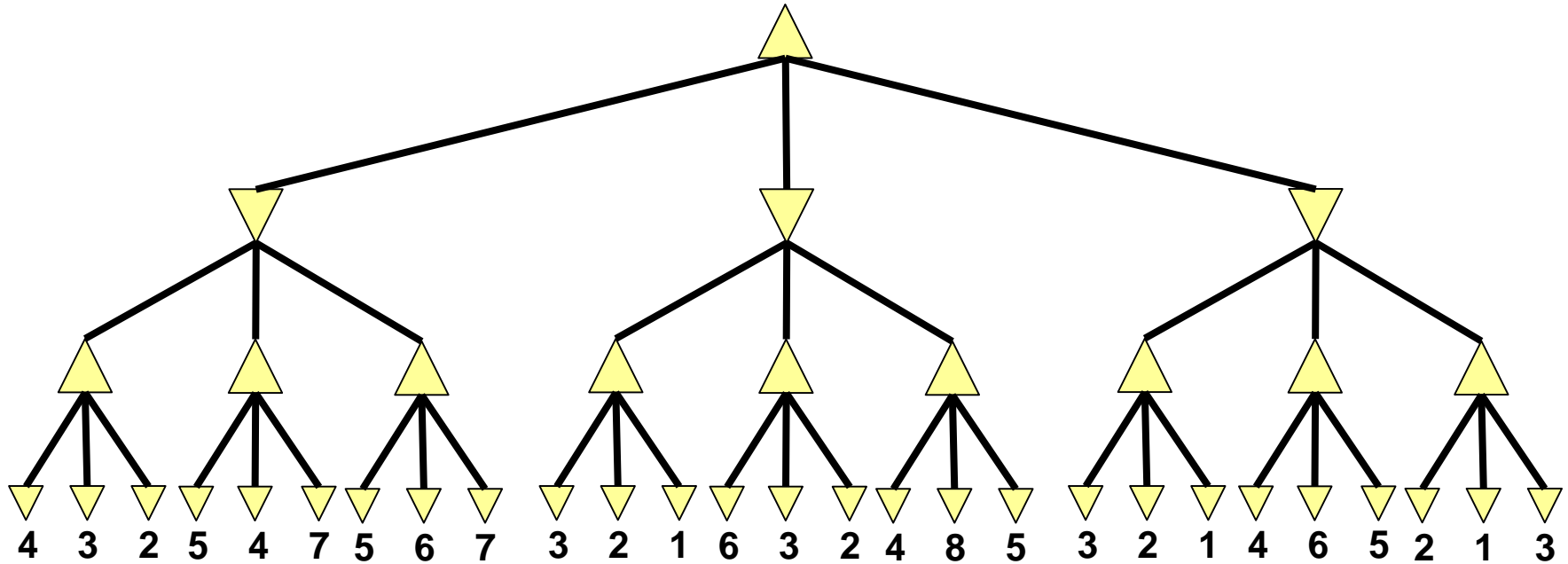


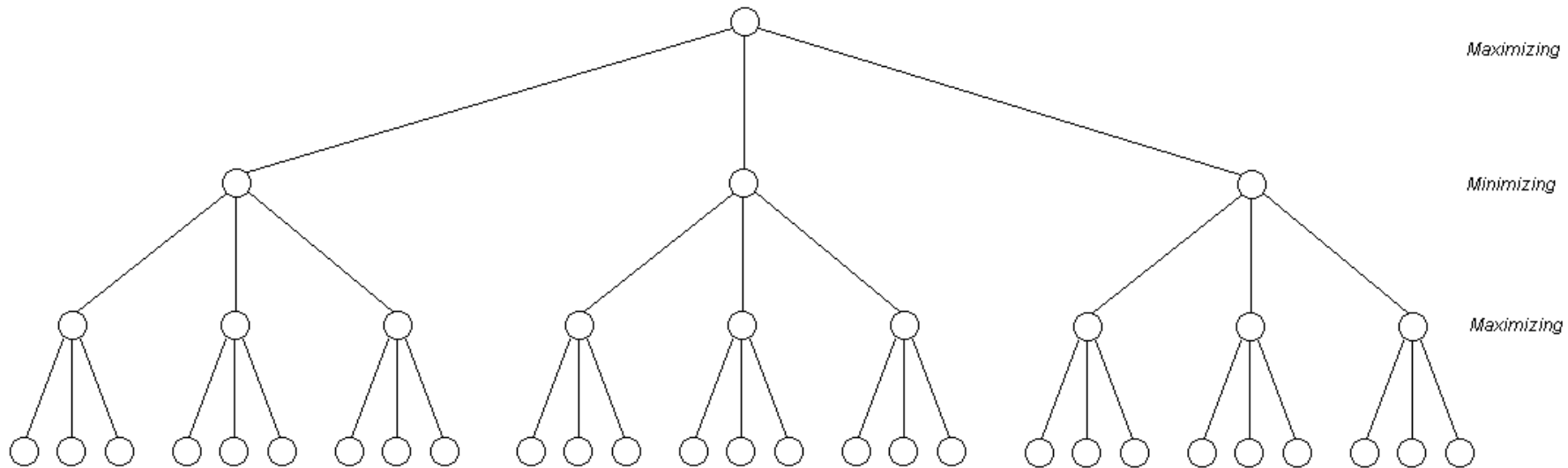
هرس کردن α - β : مثال ۲



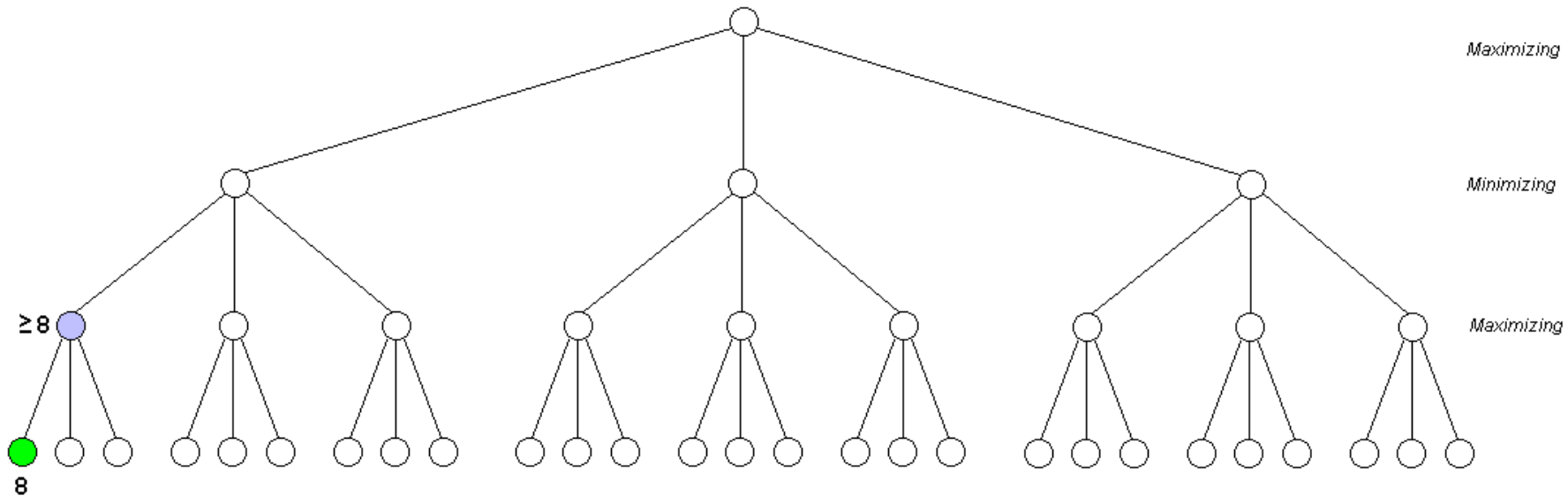
هرس کردن α - β : مثال ۲



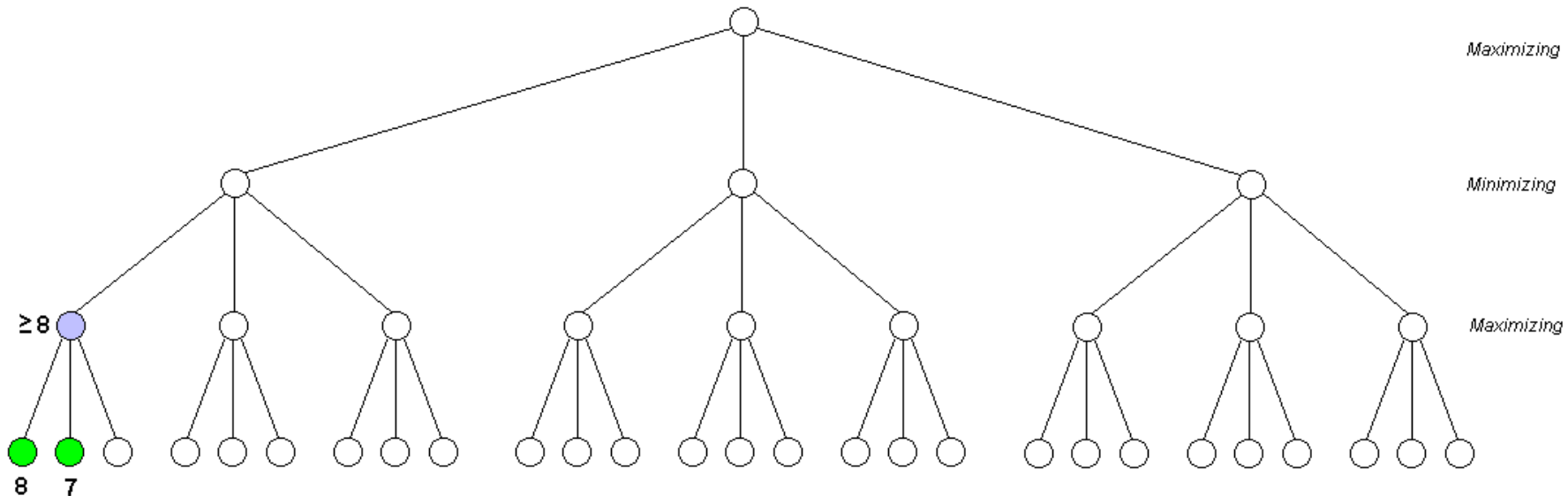
هرس کردن α - β : مثال ۲

هرس کردن α - β : مثال ۳

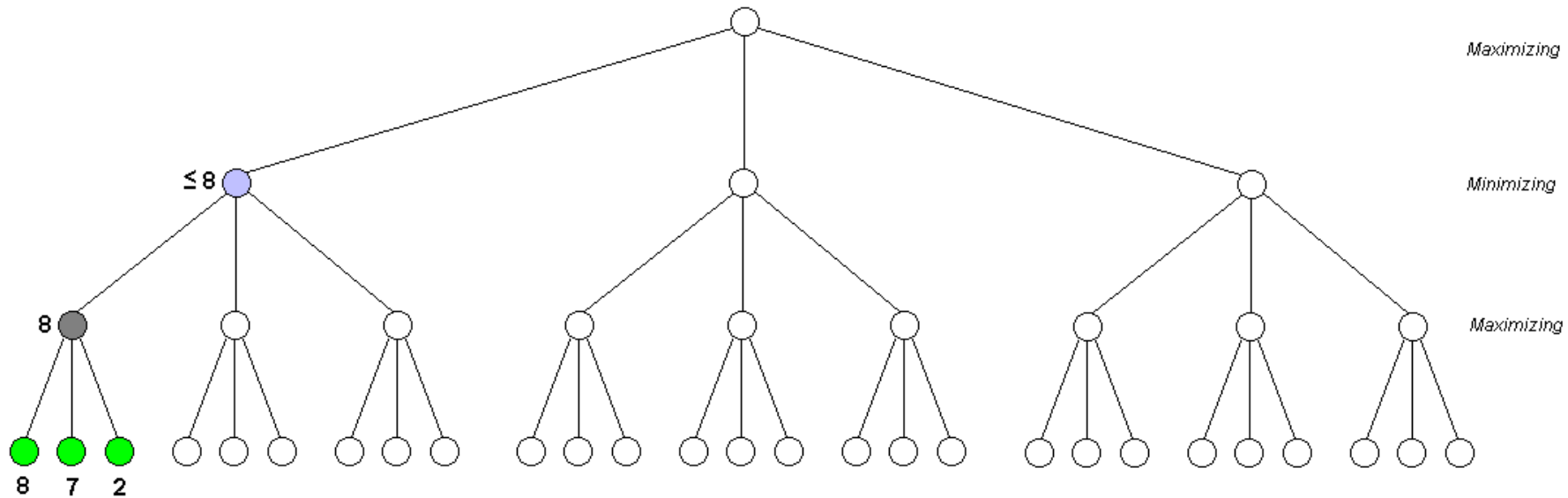
هرس کردن α - β : مثال ۳



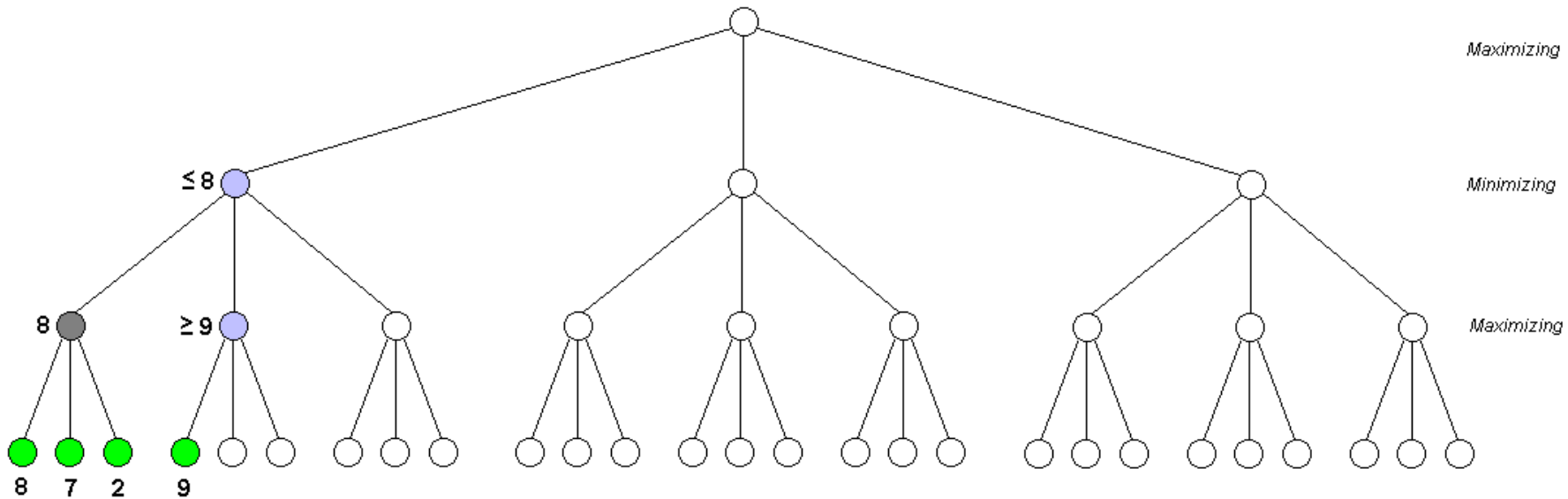
هرس کردن α - β : مثال ۳



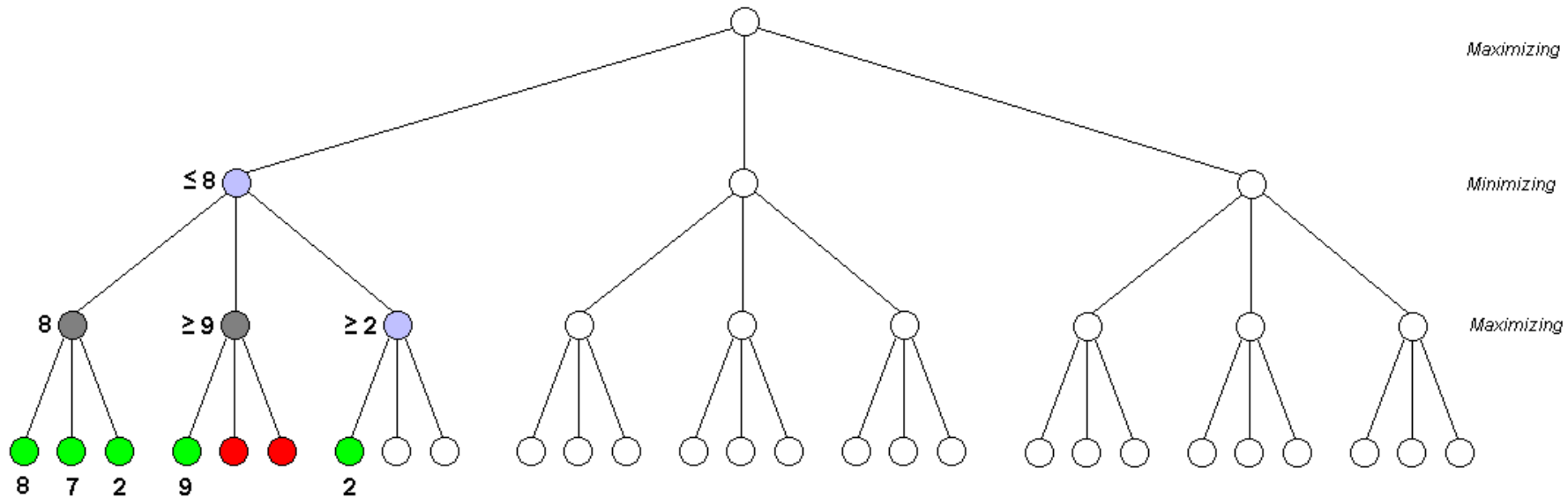
هرس کردن α - β : مثال ۳



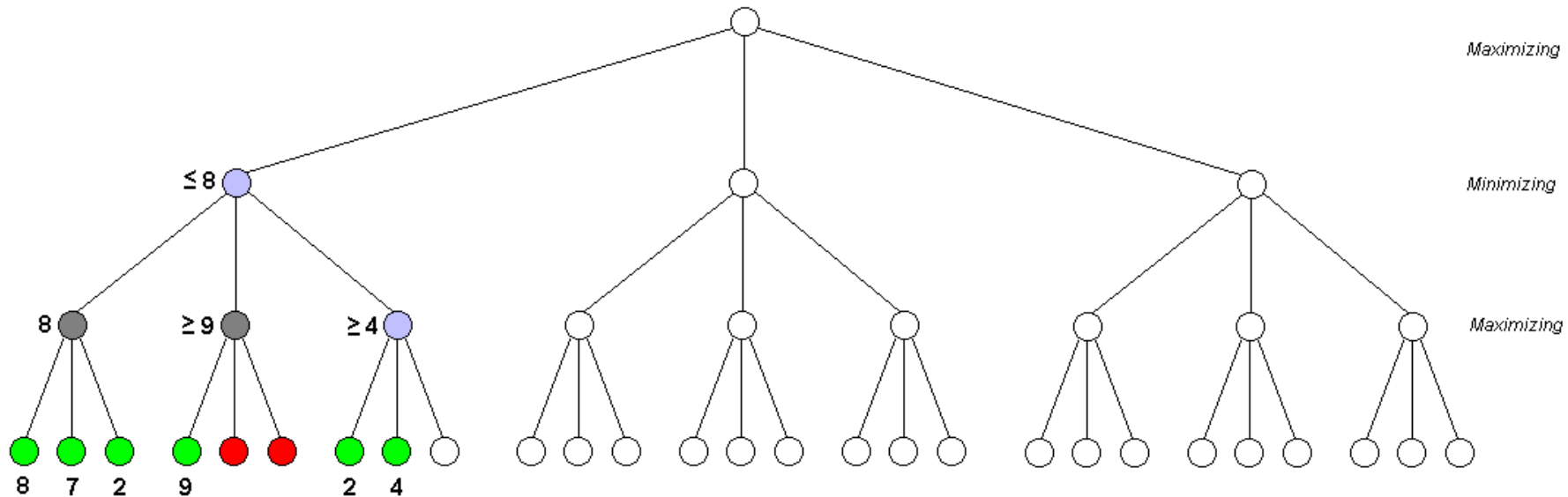
هرس کردن α - β : مثال ۳



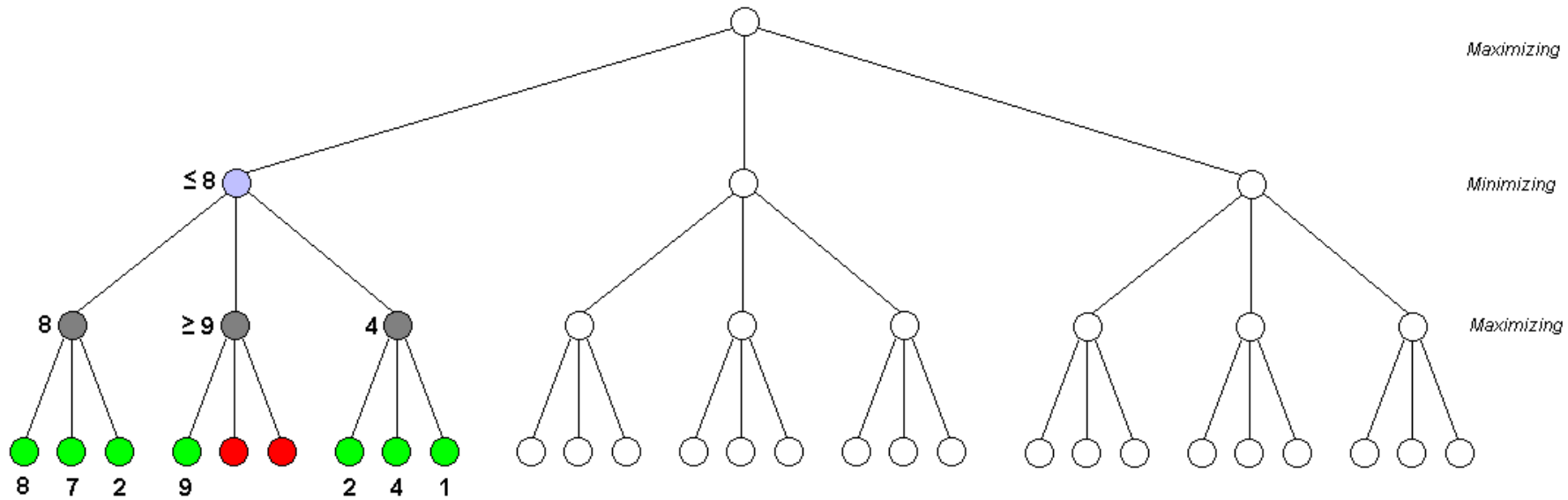
هرس کردن α - β : مثال ۳



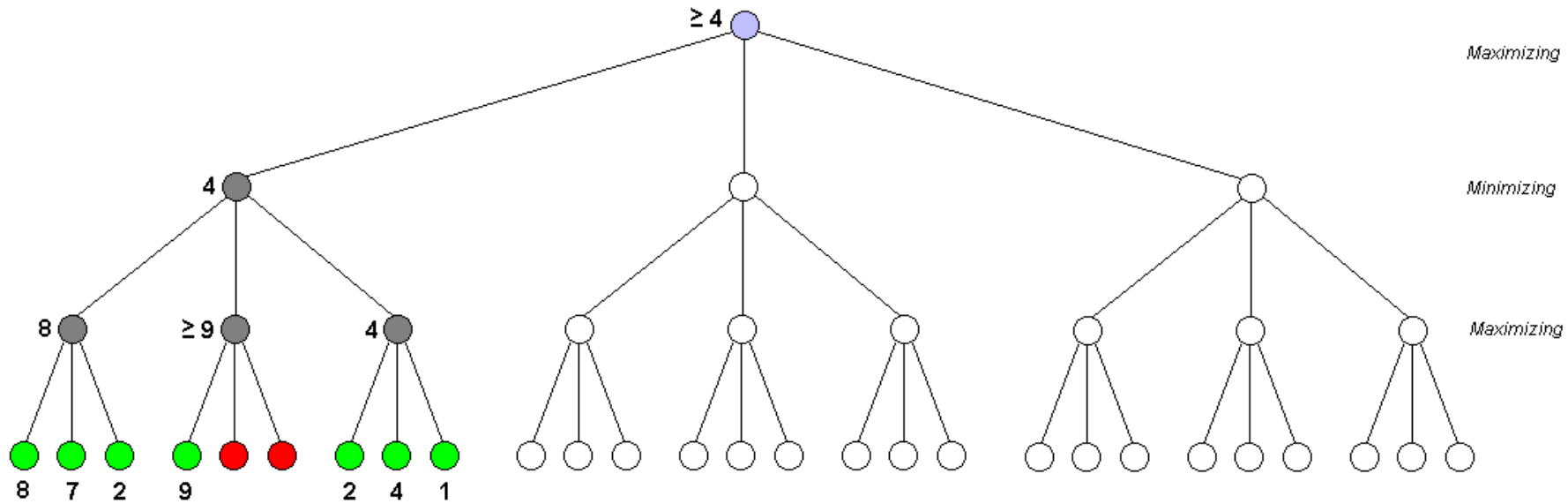
هرس کردن α - β : مثال ۳



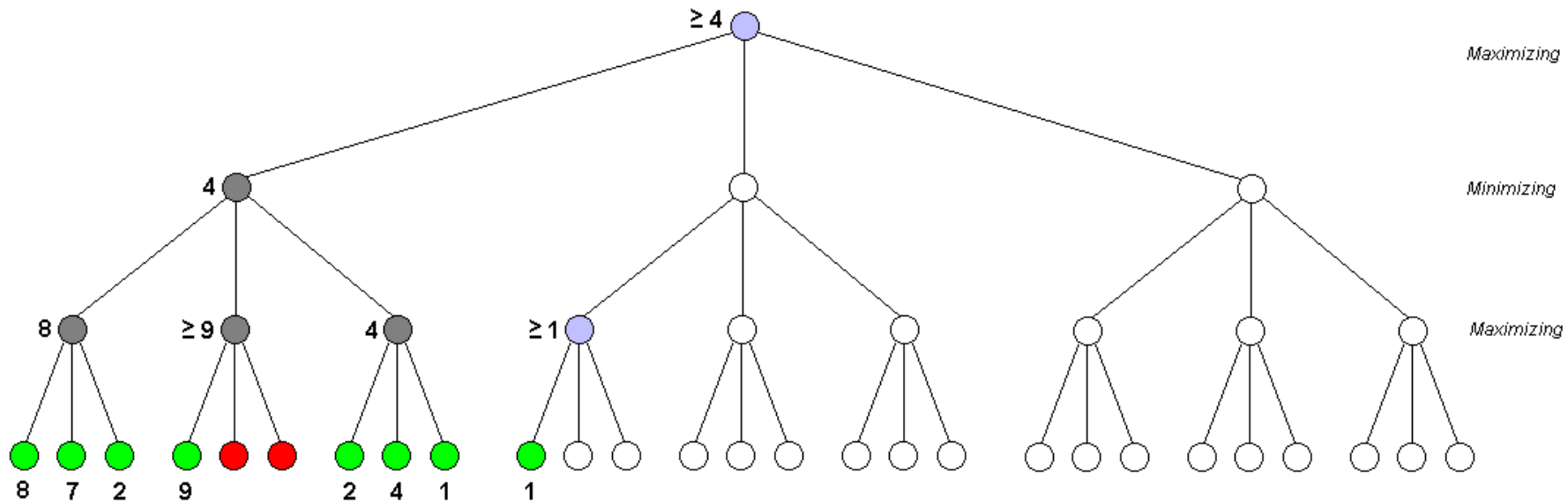
هرس کردن α - β : مثال ۳



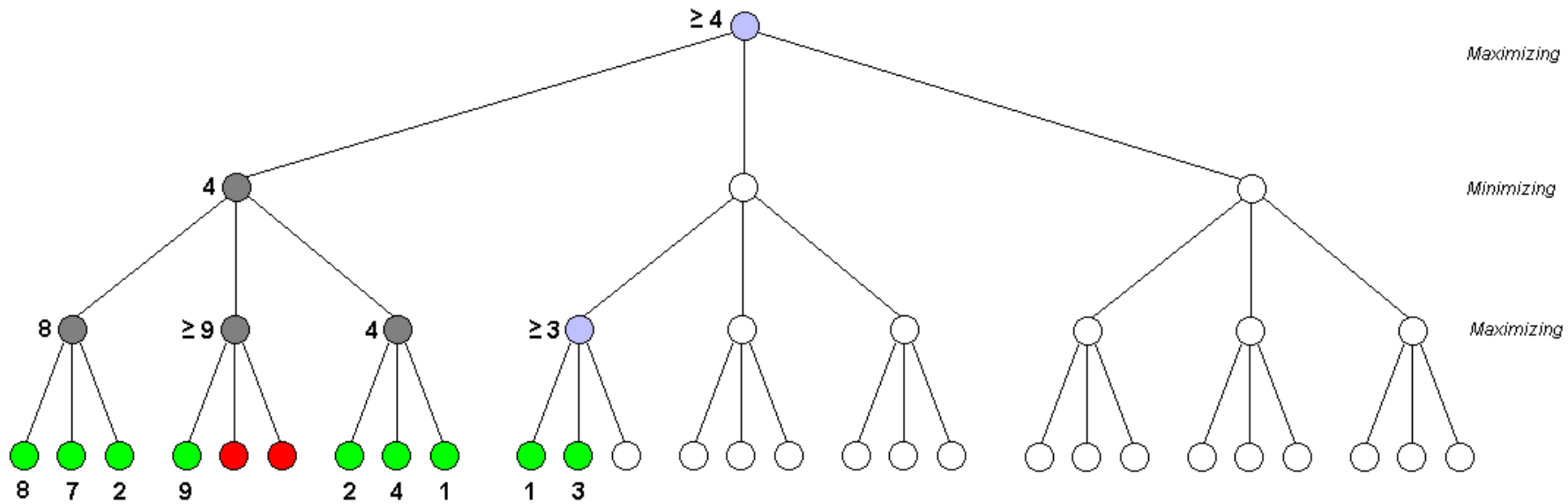
هرس کردن α - β : مثال ۳



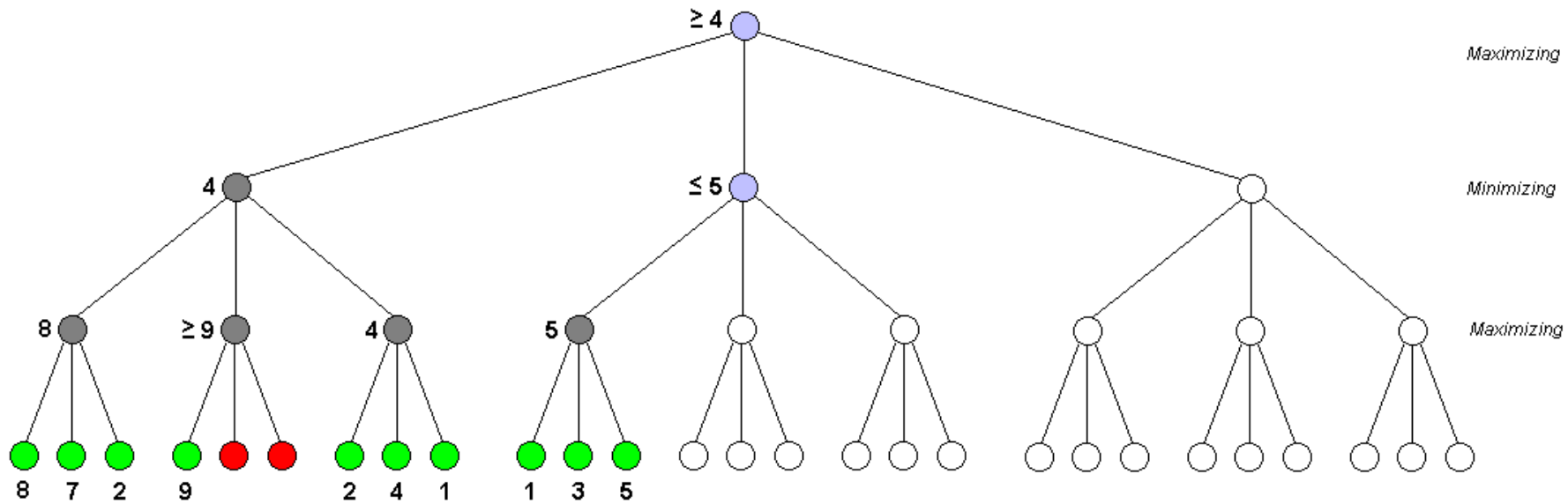
هرس کردن α - β : مثال ۳



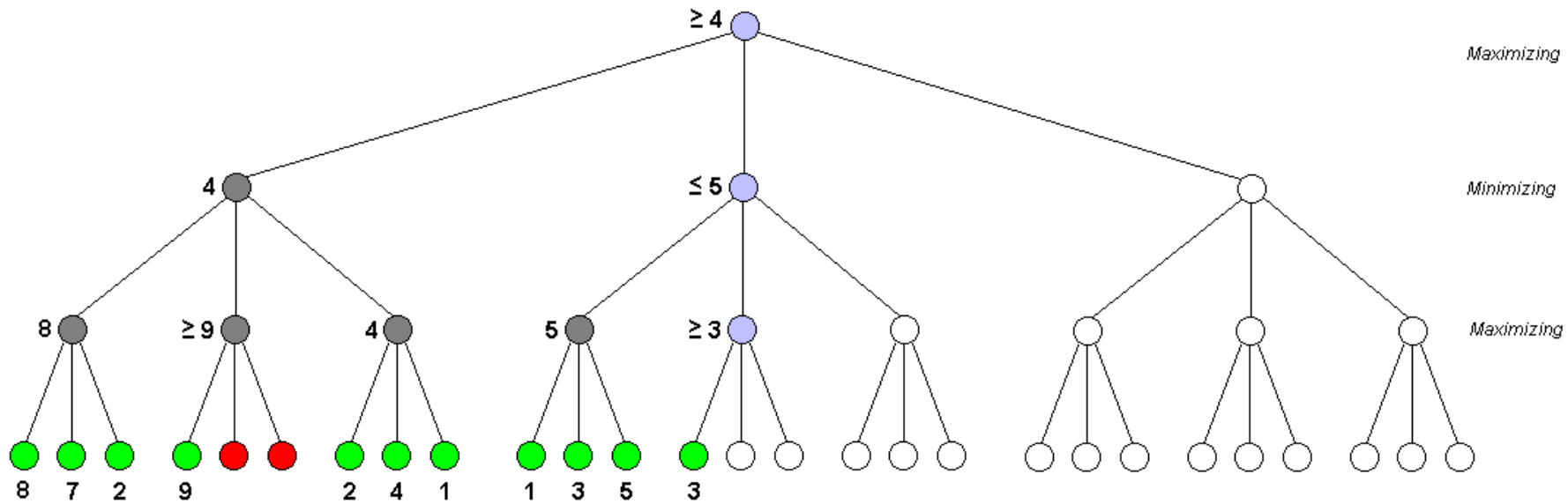
هرس کردن α - β : مثال ۳



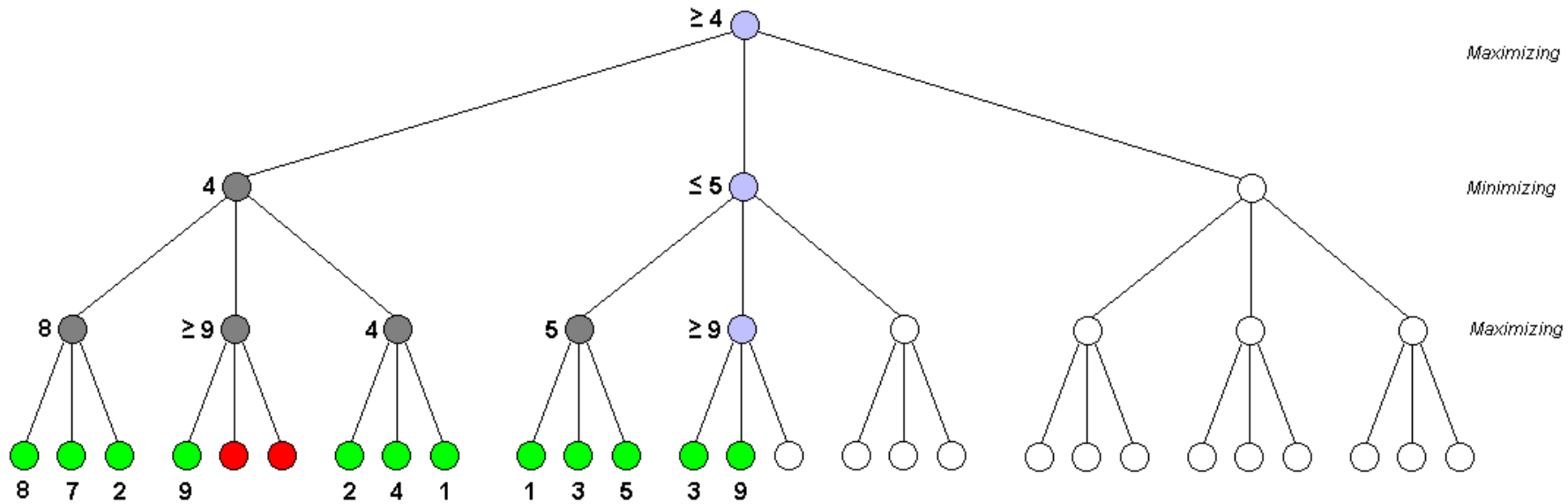
هرس کردن α - β : مثال ۳



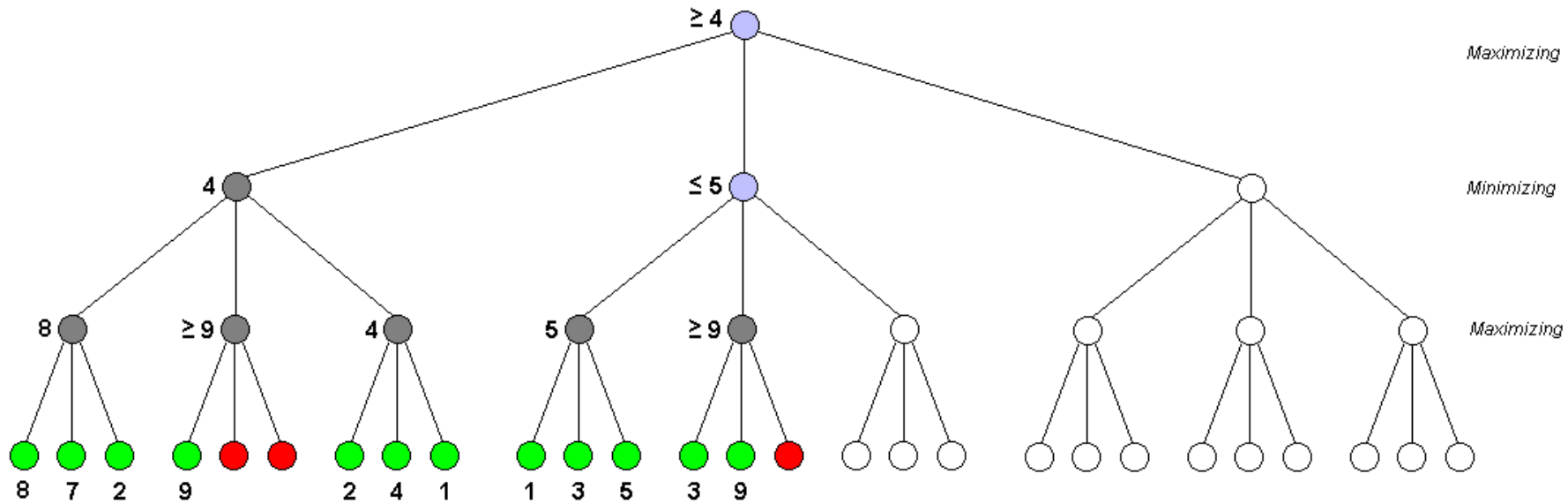
هرس کردن α - β : مثال ۳



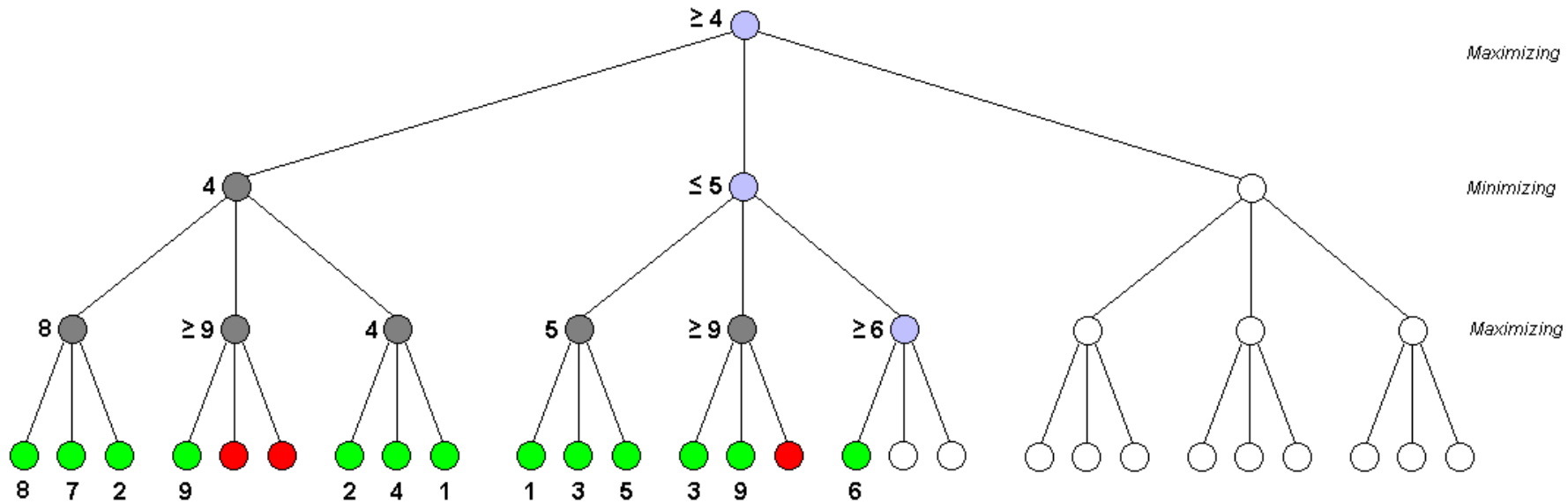
هرس کردن α - β : مثال ۳



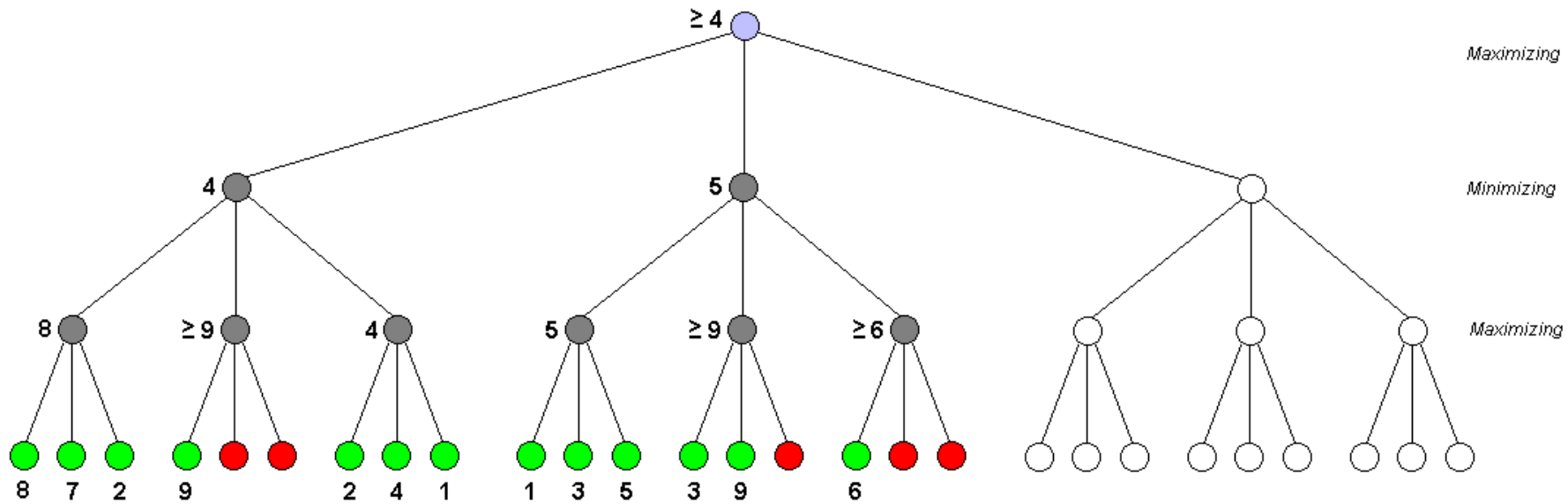
هرس کردن α - β : مثال ۳



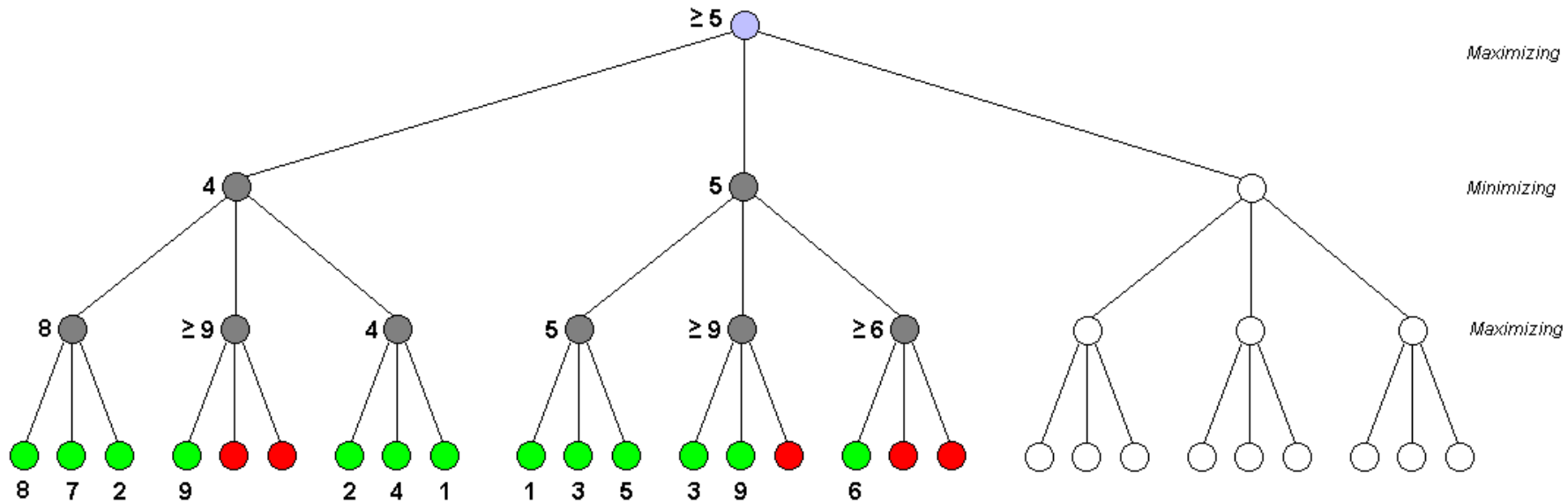
هرس کردن α - β : مثال ۳



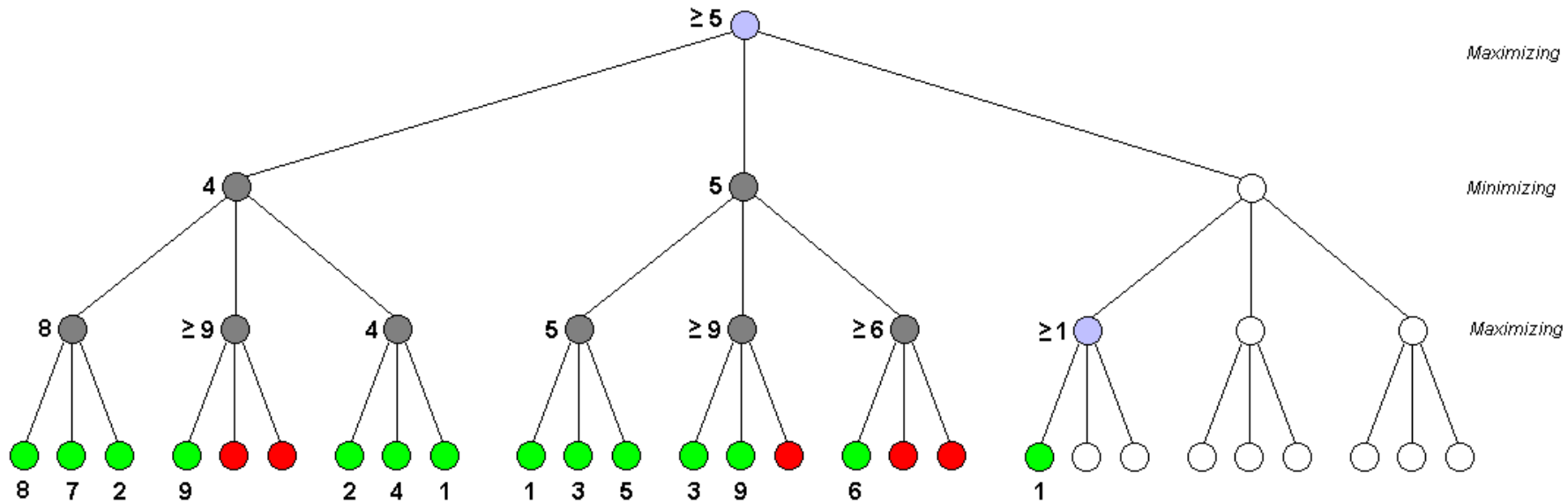
هرس کردن α - β : مثال ۳



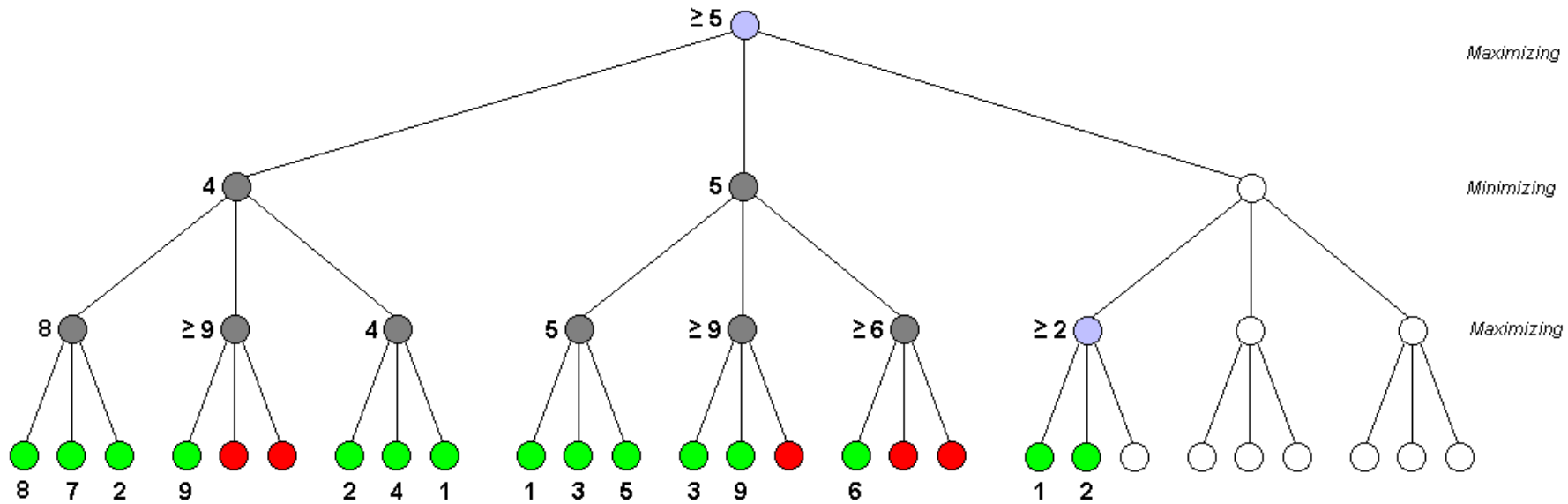
هرس کردن α - β : مثال ۳



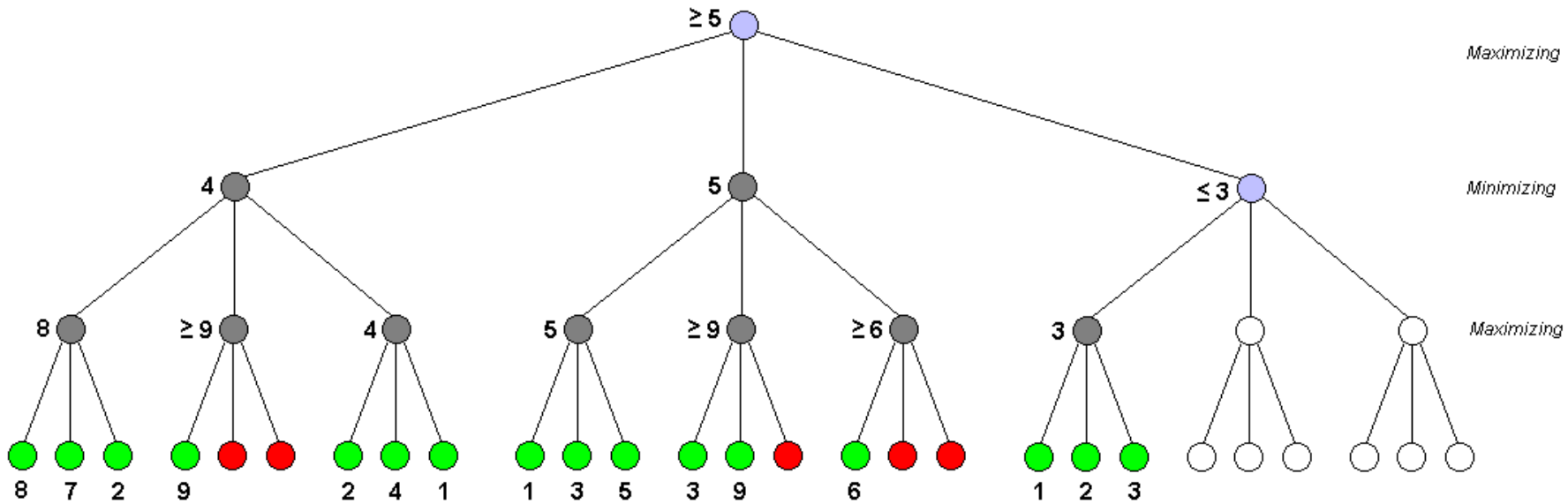
هرس کردن α - β : مثال ۳



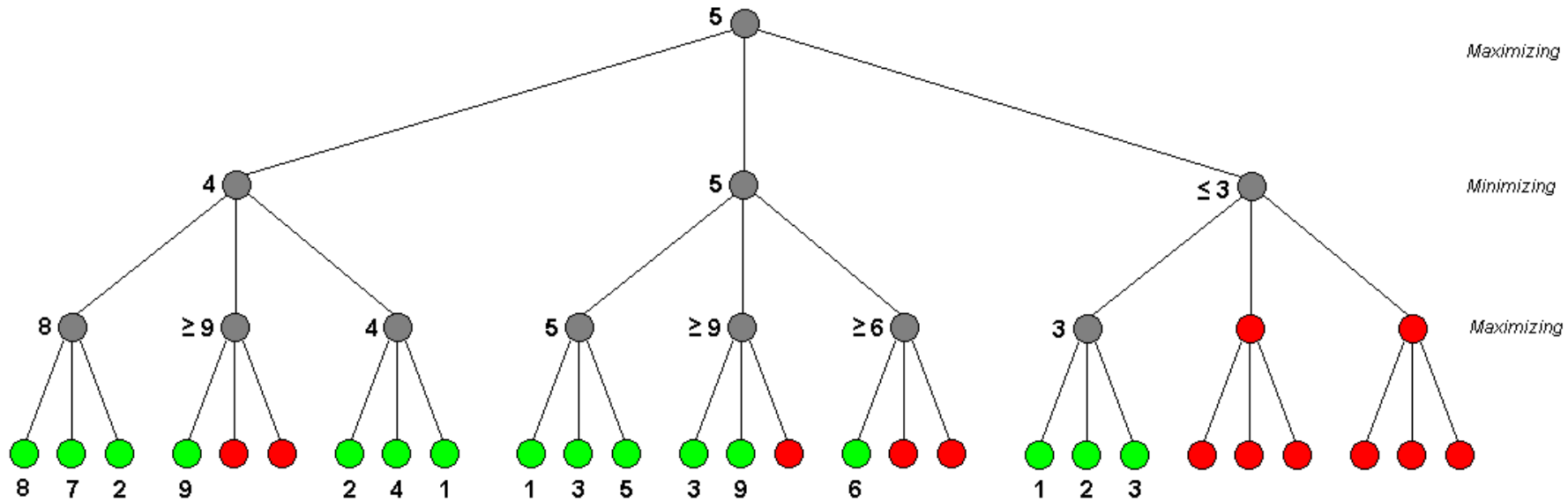
هرس کردن α - β : مثال ۳



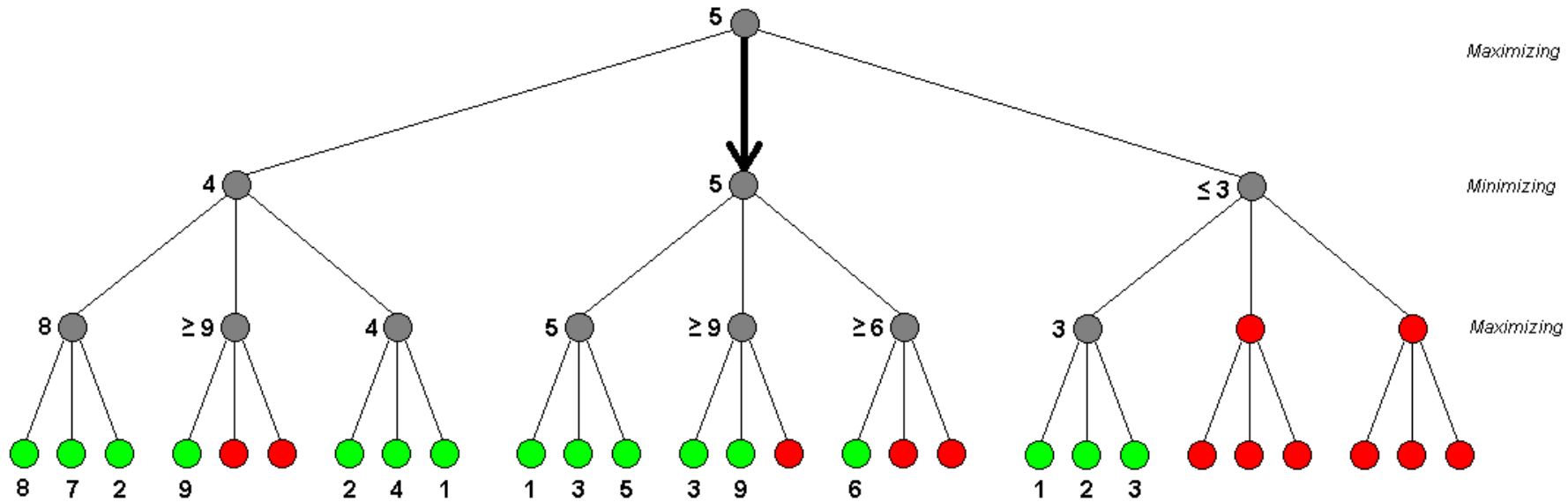
هرس کردن α - β : مثال ۳



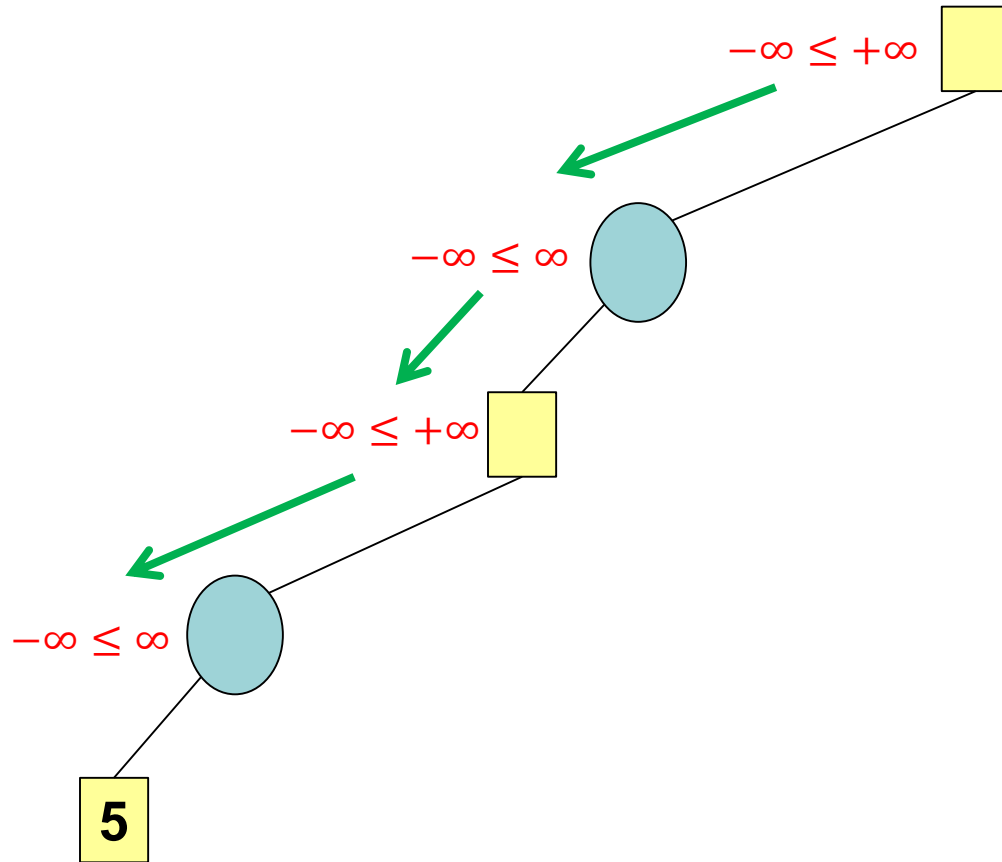
هرس کردن α - β : مثال ۳



هرس کردن α - β : مثال ۳

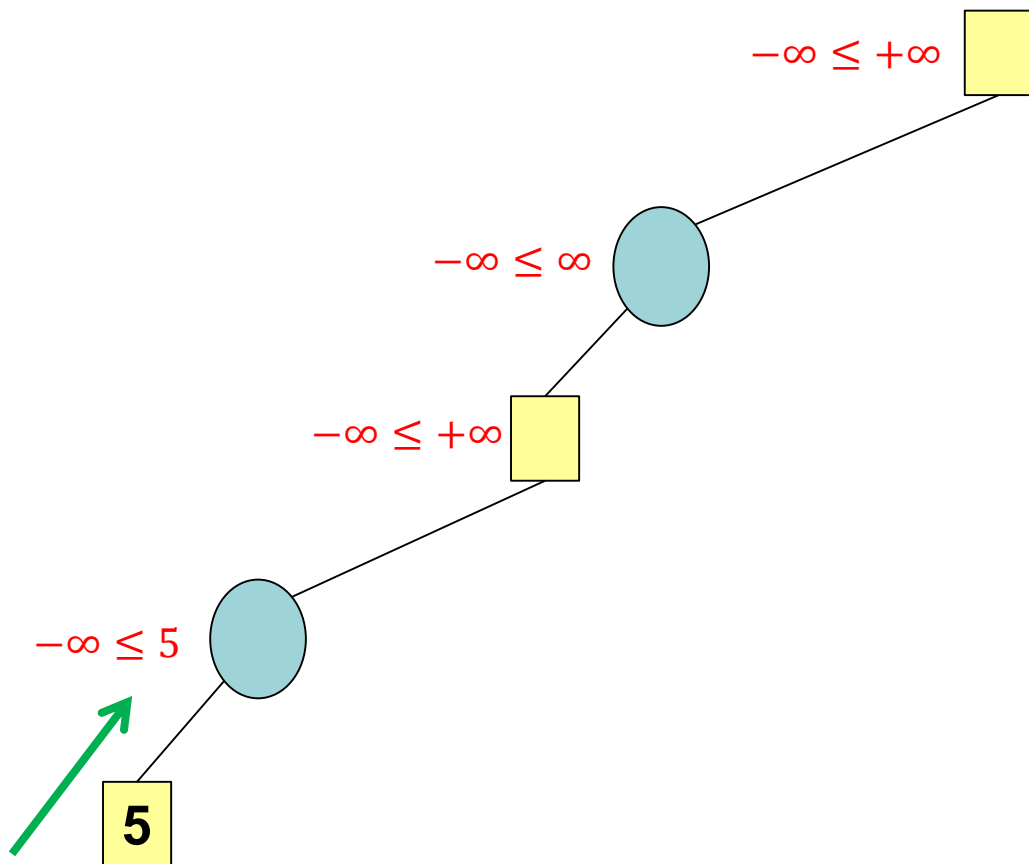


مثال ۴: گام ۱



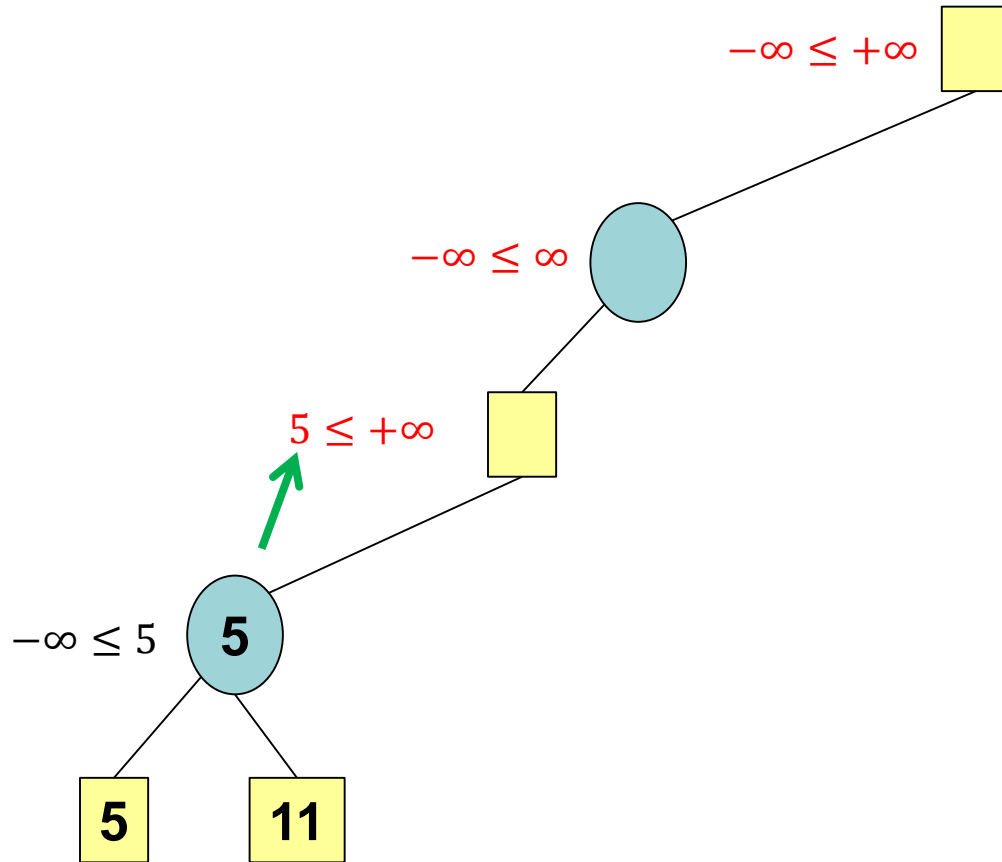
α is the maximum lower bound of possible solutions (MAX plays)
 β is the minimum upper bound of possible solutions (MIN plays)

مثال ۴: گام ۲



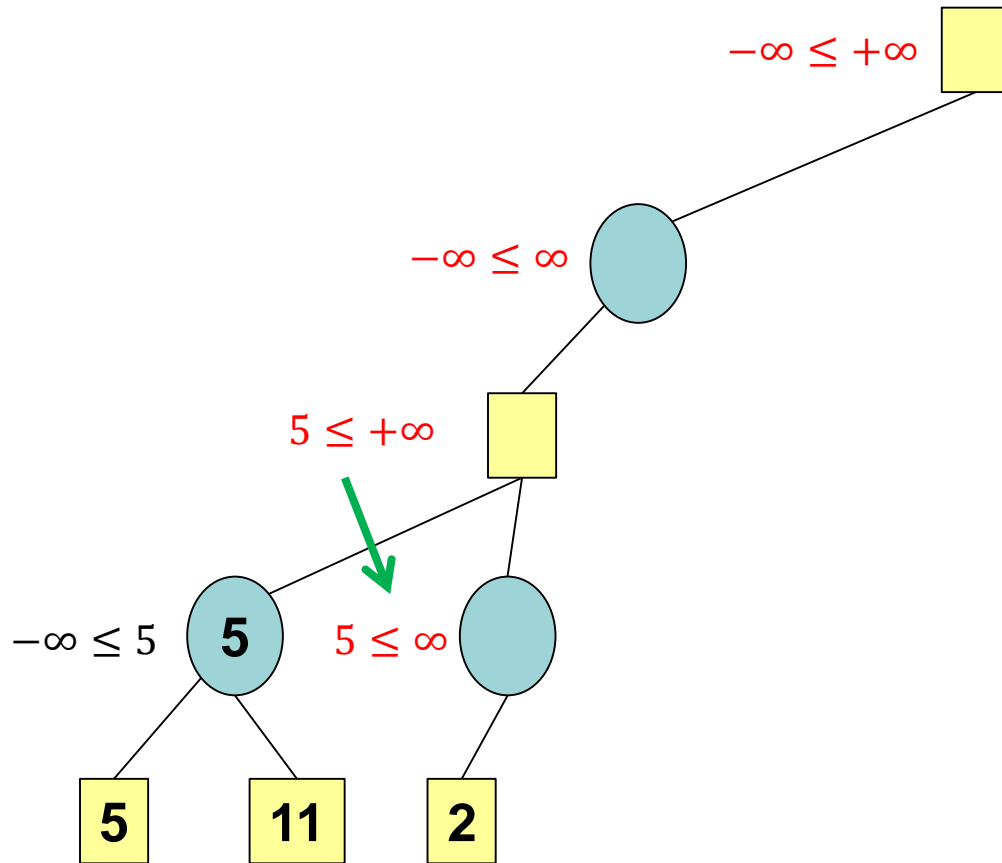
α is the maximum lower bound of possible solutions (MAX plays)
 β is the minimum upper bound of possible solutions (MIN plays)

مثال ۴: گام ۳



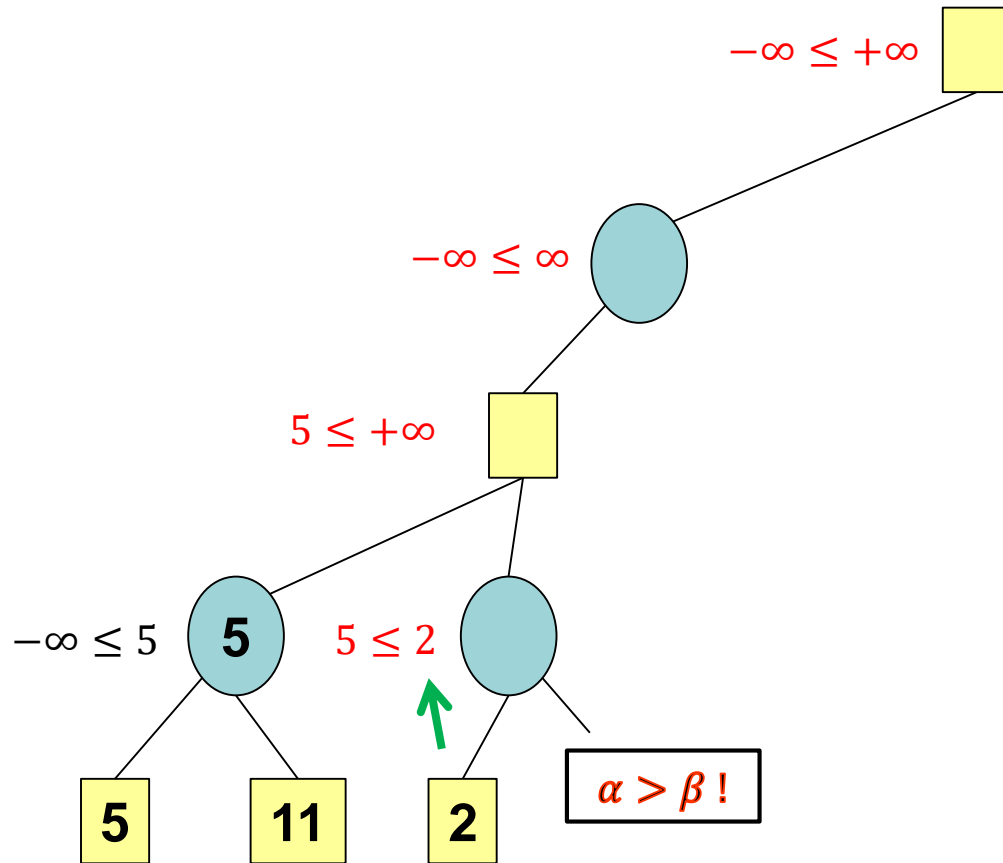
α is the maximum lower bound of possible solutions (MAX plays)
 β is the minimum upper bound of possible solutions (MIN plays)

مثال ۴: گام ۴



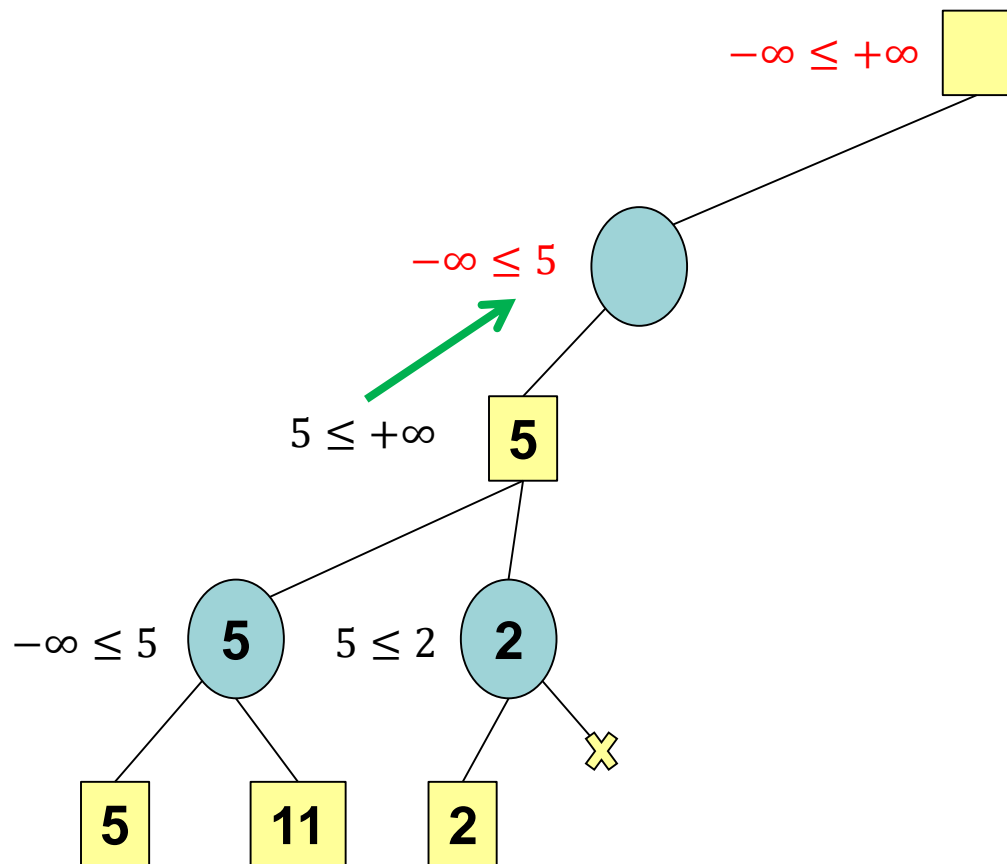
α is the maximum lower bound of possible solutions (MAX plays)
 β is the minimum upper bound of possible solutions (MIN plays)

مثال ۴: گام ۵



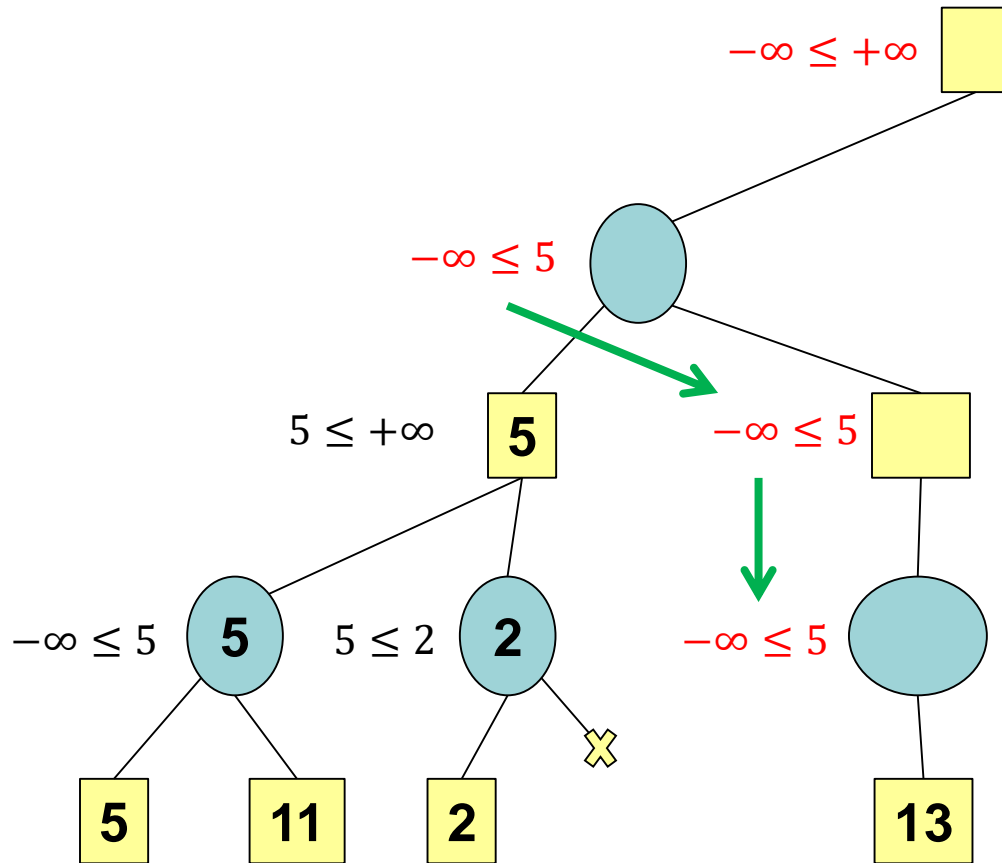
α is the maximum lower bound of possible solutions (MAX plays)
 β is the minimum upper bound of possible solutions (MIN plays)

مثال ۴: گام ۶



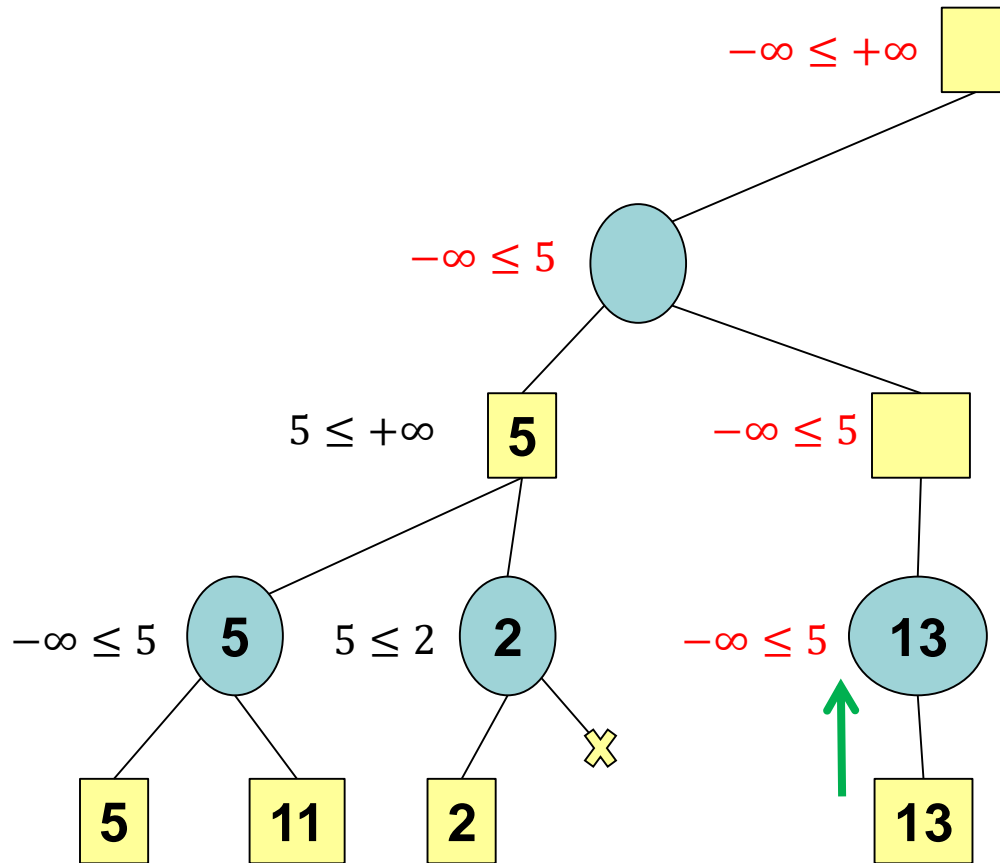
α is the maximum lower bound of possible solutions (MAX plays)
 β is the minimum upper bound of possible solutions (MIN plays)

مثال ۴: گام ۷



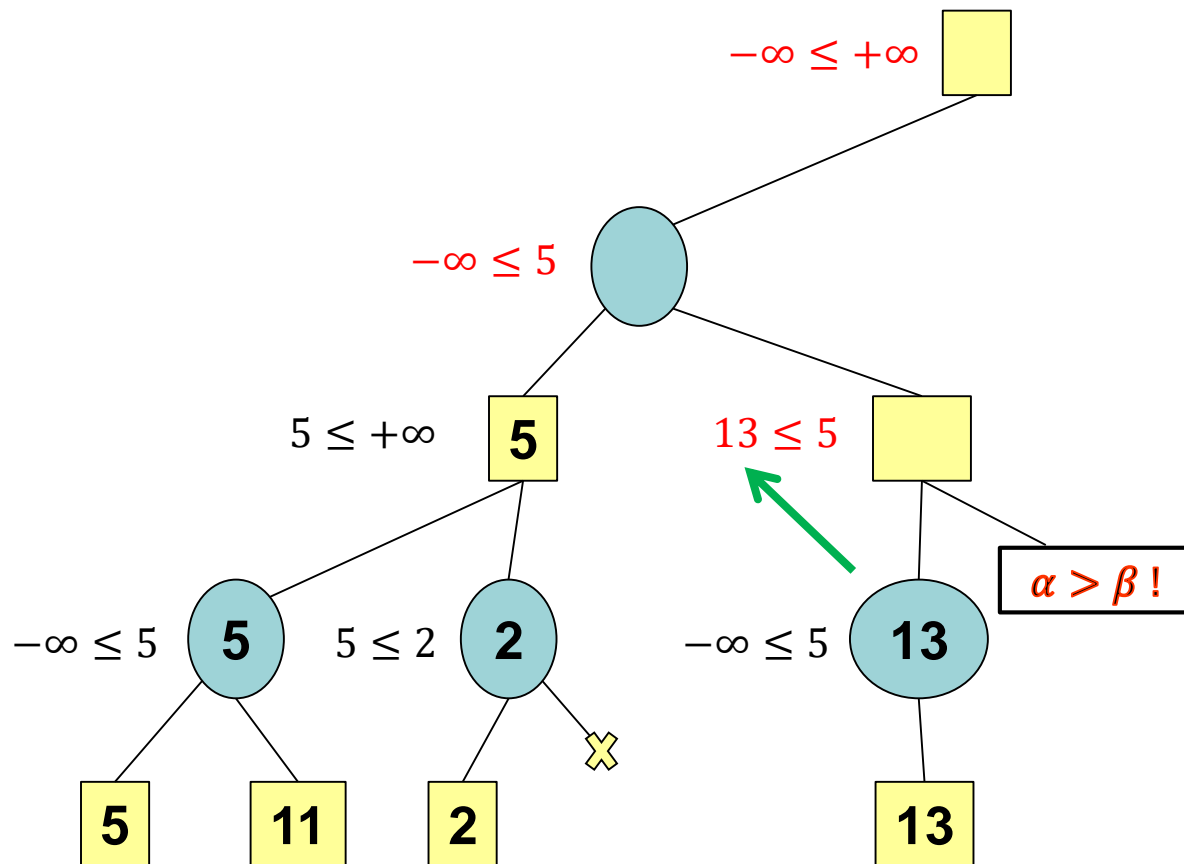
α is the maximum lower bound of possible solutions (MAX plays)
 β is the minimum upper bound of possible solutions (MIN plays)

مثال ۴: گام ۸



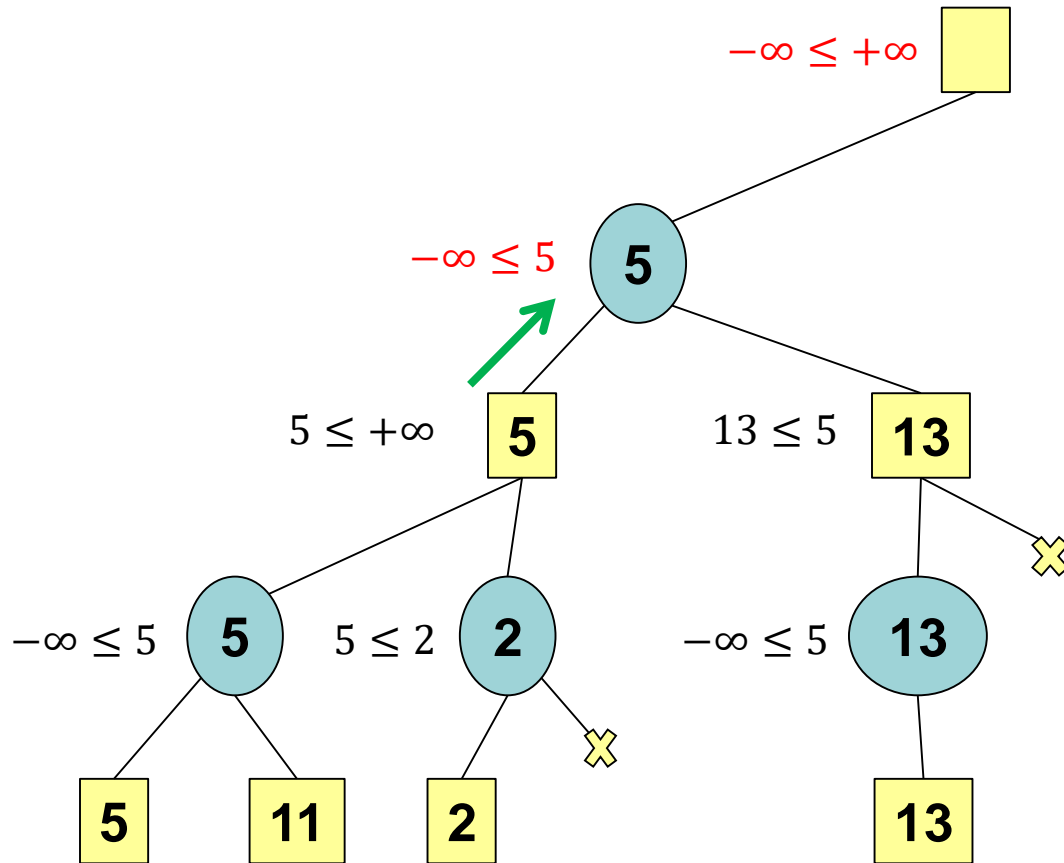
α is the maximum lower bound of possible solutions (MAX plays)
 β is the minimum upper bound of possible solutions (MIN plays)

مثال ۴: گام ۹



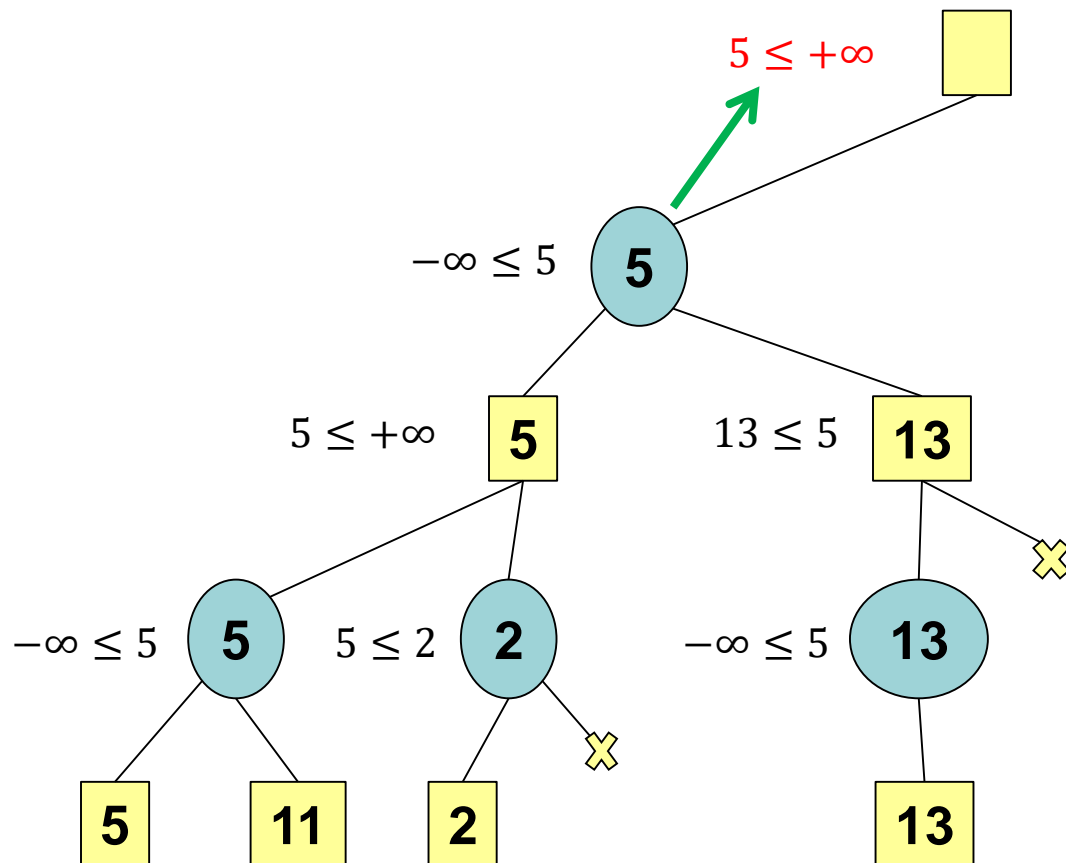
α is the maximum lower bound of possible solutions (MAX plays)
 β is the minimum upper bound of possible solutions (MIN plays)

مثال ۴: گام ۱۰



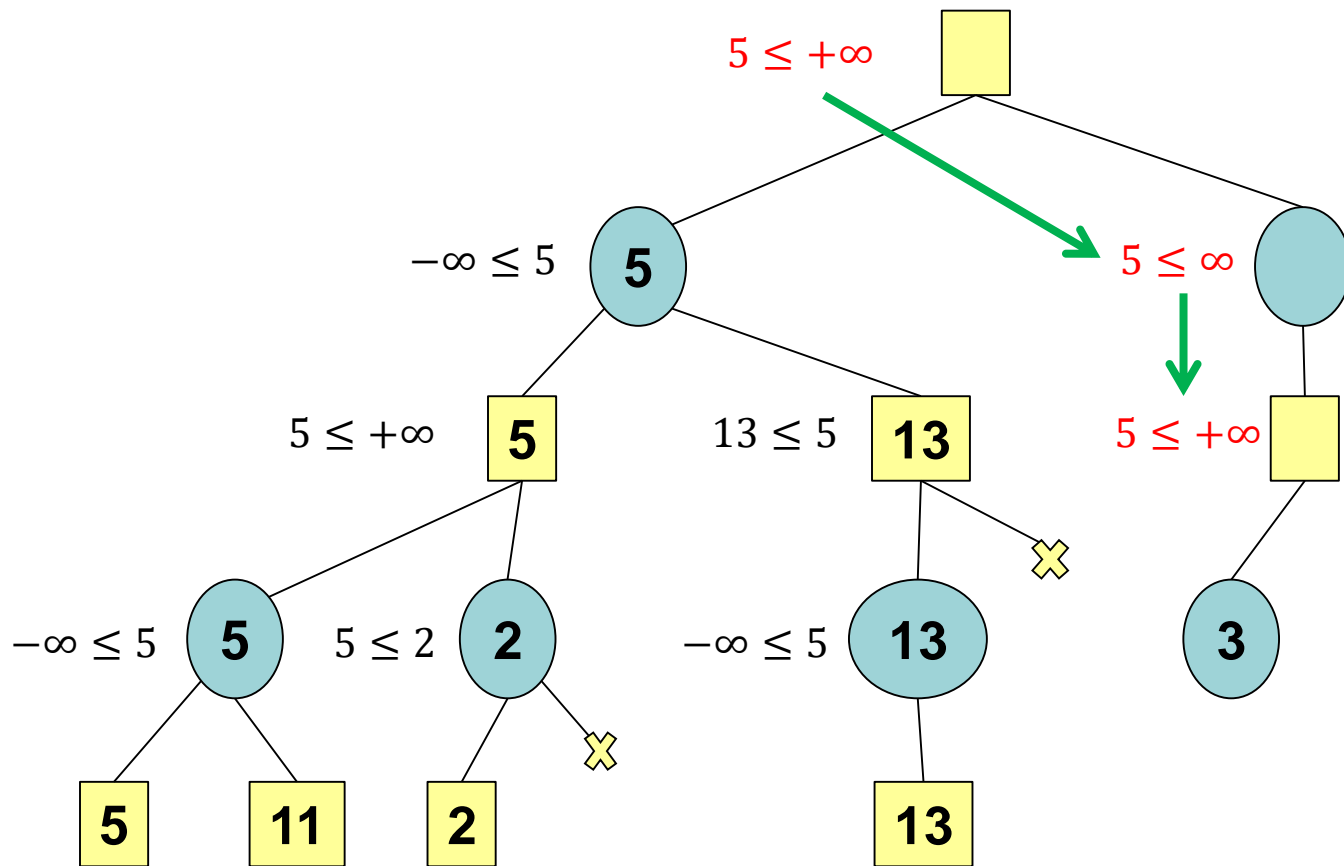
α is the maximum lower bound of possible solutions (MAX plays)
 β is the minimum upper bound of possible solutions (MIN plays)

مثال ۴: گام ۱۱



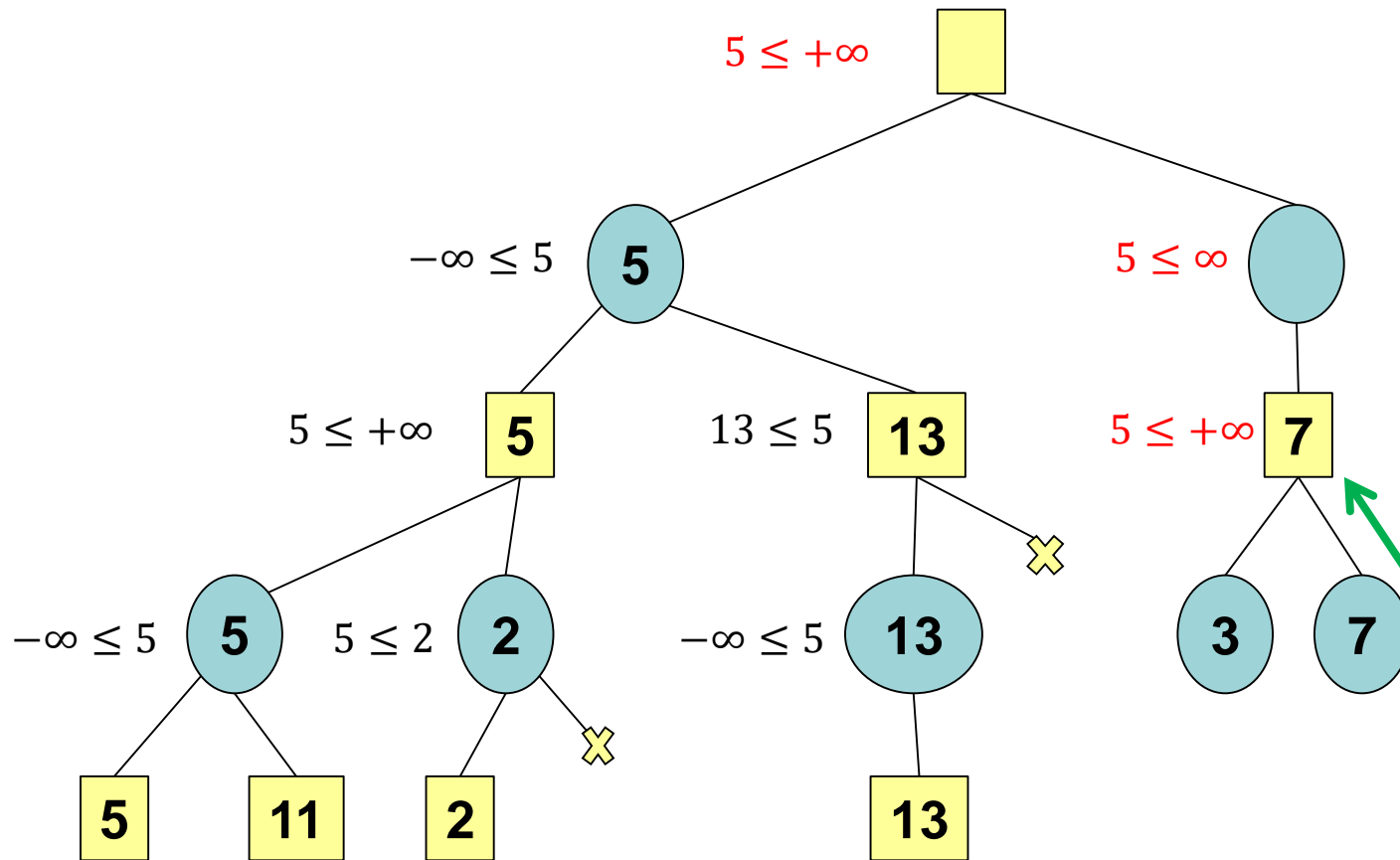
α is the maximum lower bound of possible solutions (MAX plays)
 β is the minimum upper bound of possible solutions (MIN plays)

مثال ۴: گام ۱۲



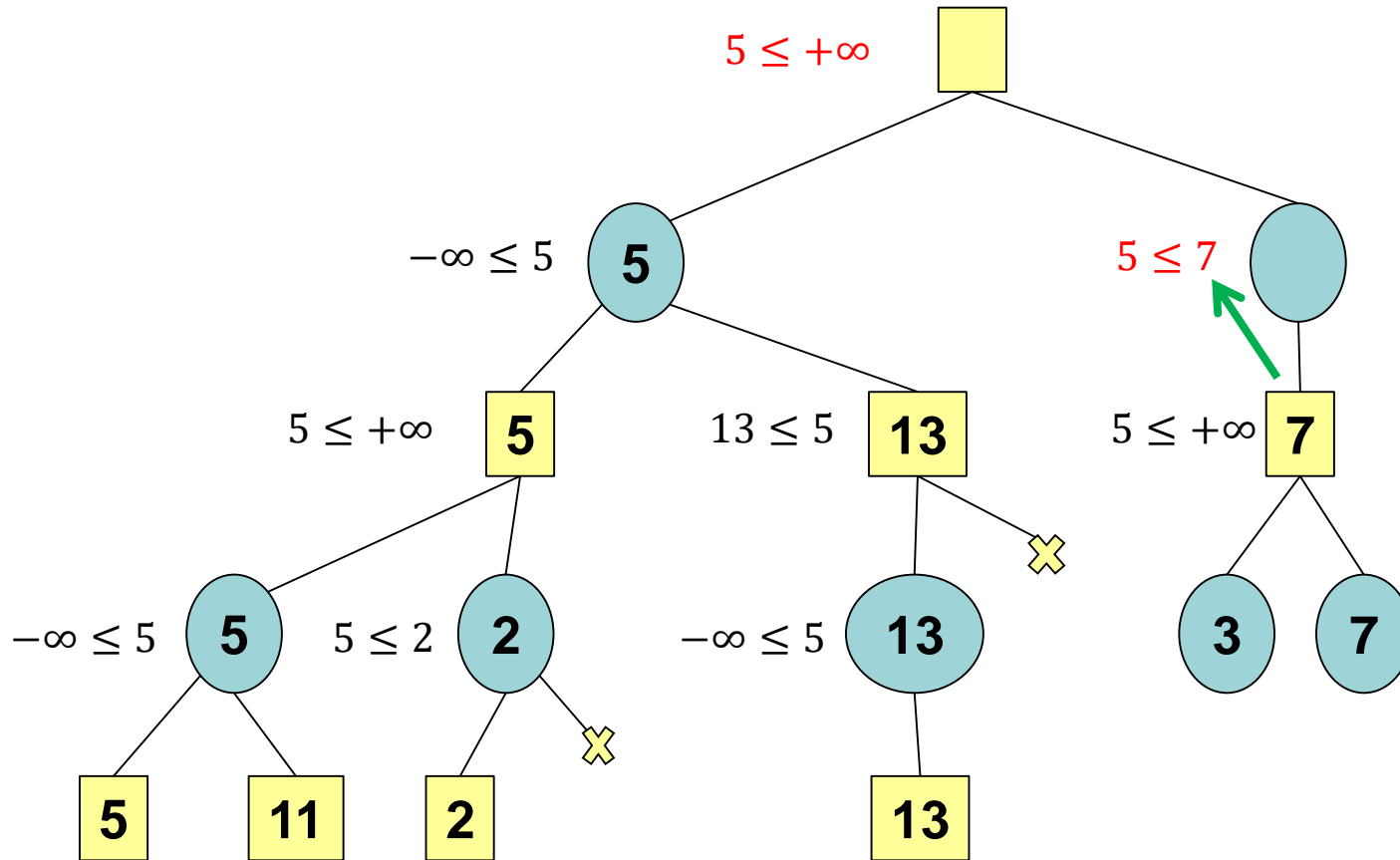
α is the maximum lower bound of possible solutions (MAX plays)
 β is the minimum upper bound of possible solutions (MIN plays)

مثال ۴: گام ۱۳



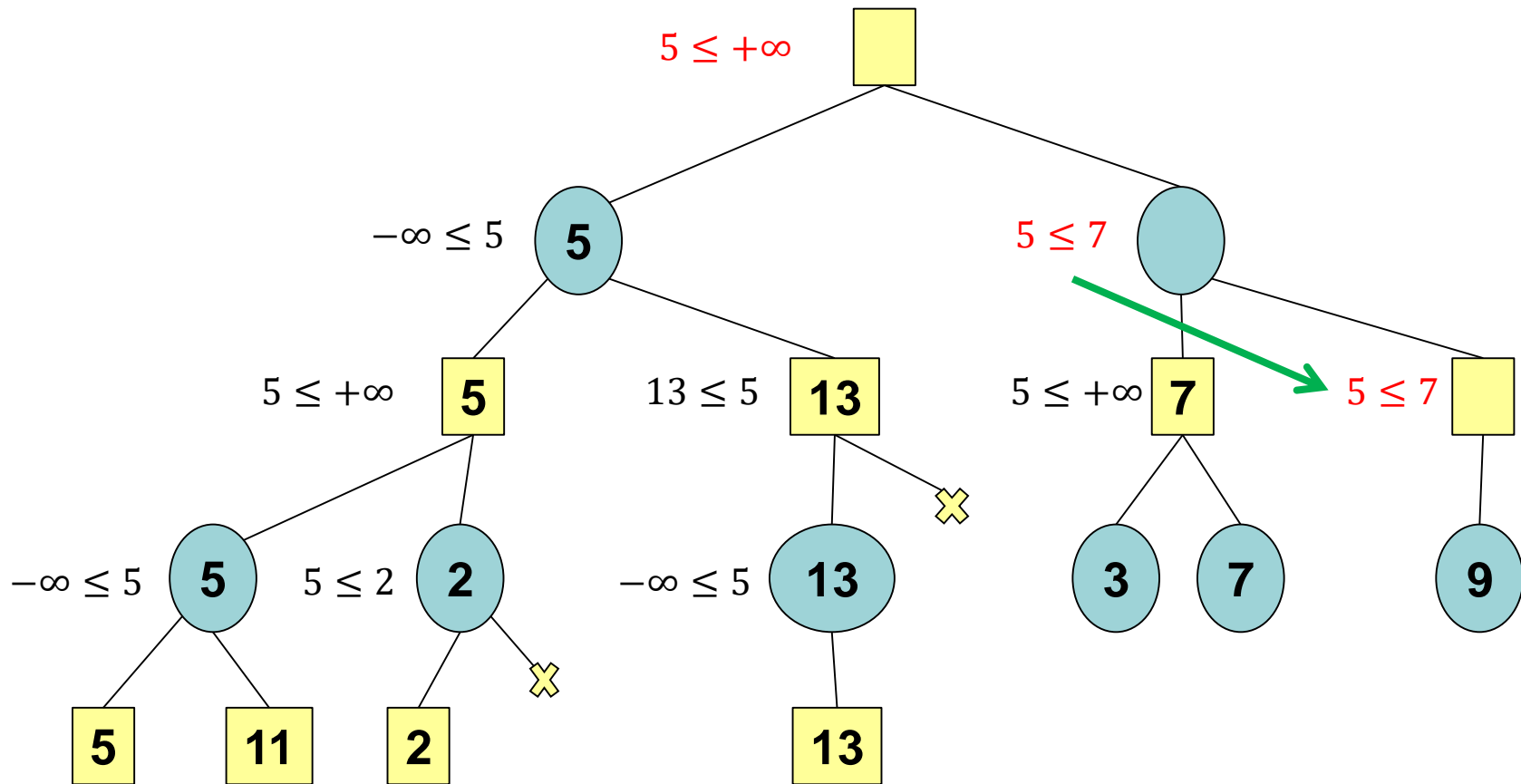
α is the maximum lower bound of possible solutions (MAX plays)
 β is the minimum upper bound of possible solutions (MIN plays)

مثال ۴: گام ۱۴



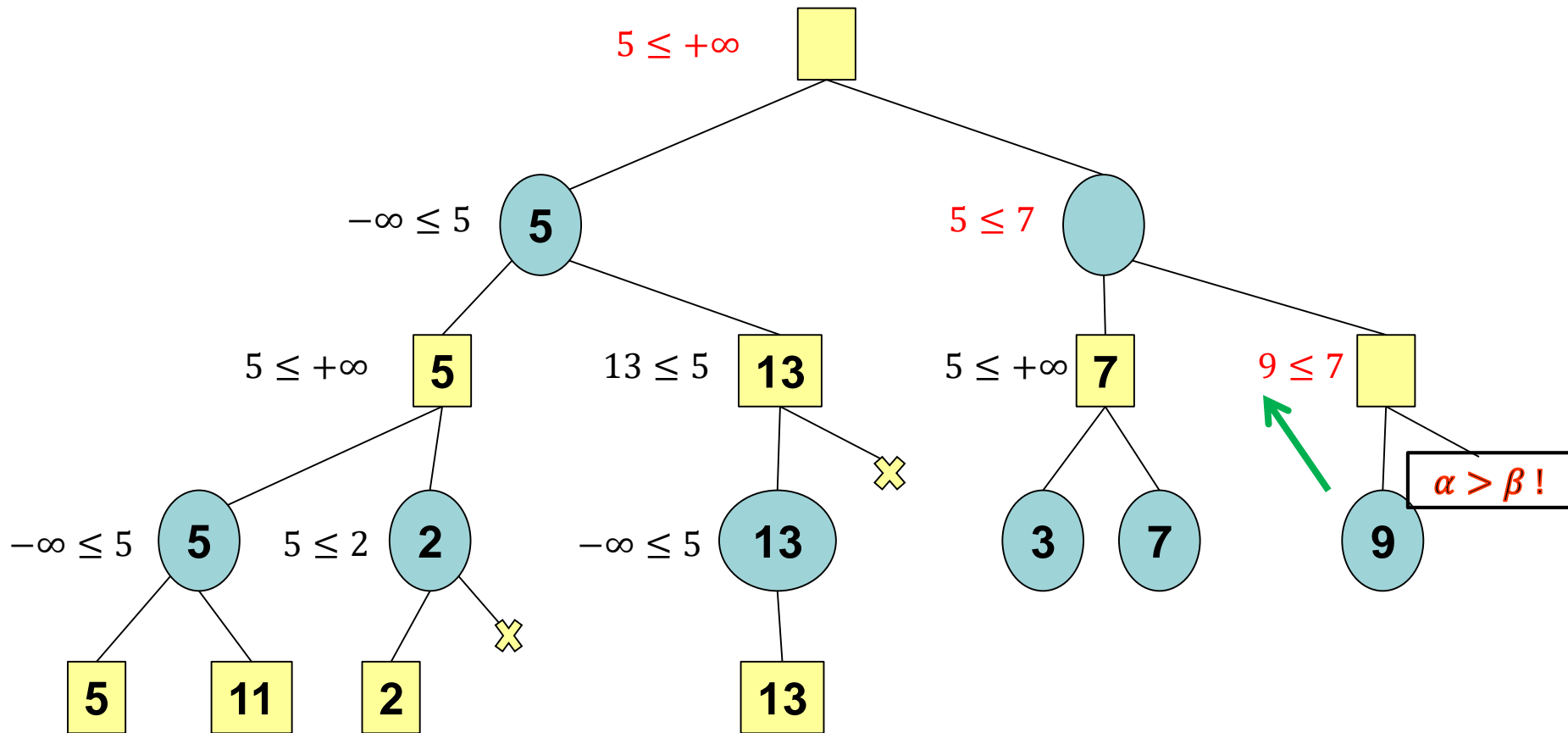
α is the maximum lower bound of possible solutions (MAX plays)
 β is the minimum upper bound of possible solutions (MIN plays)

مثال ۴: گام ۱۵



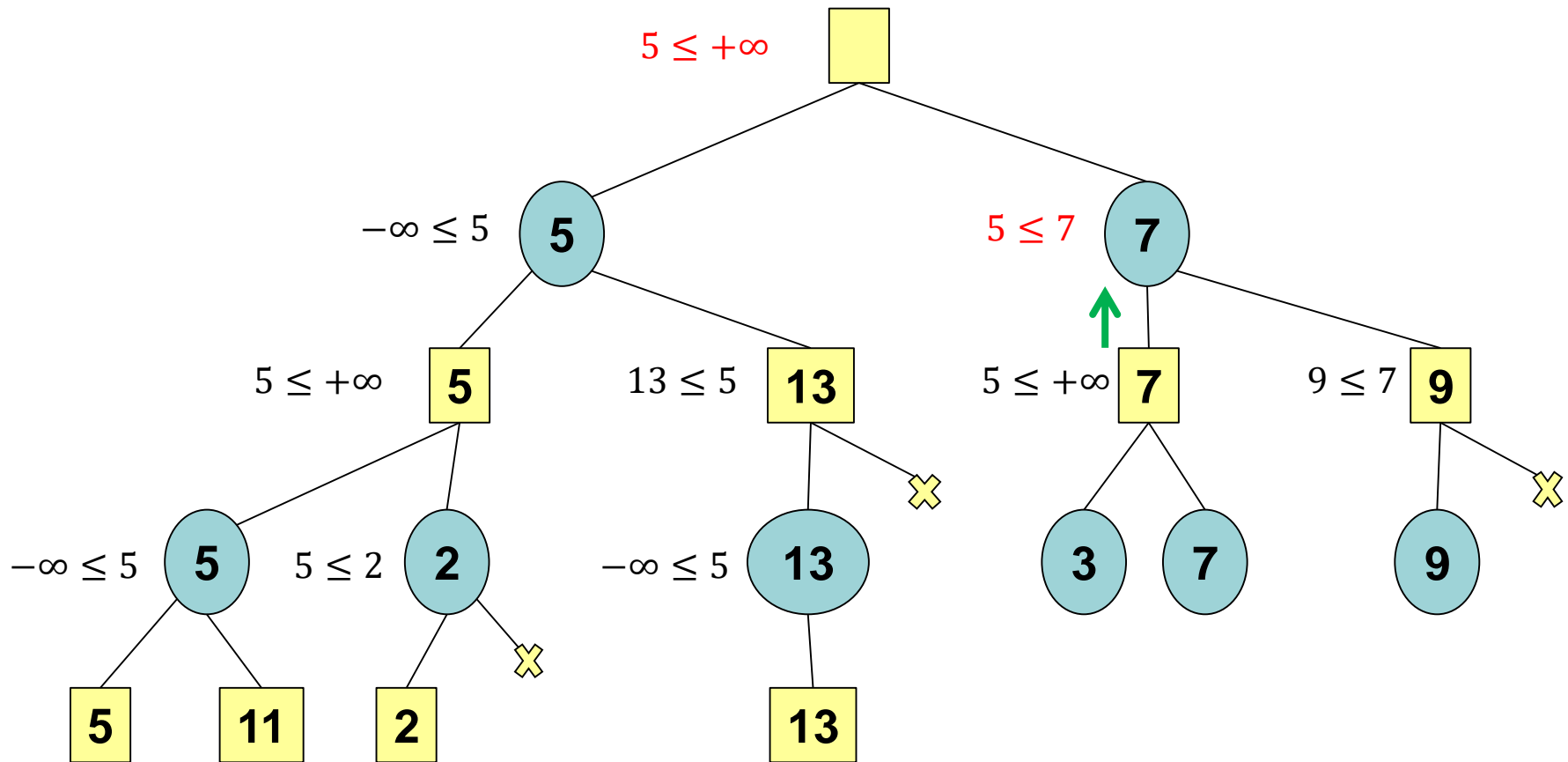
α is the maximum lower bound of possible solutions (MAX plays)
 β is the minimum upper bound of possible solutions (MIN plays)

مثال ۴: گام ۱۶



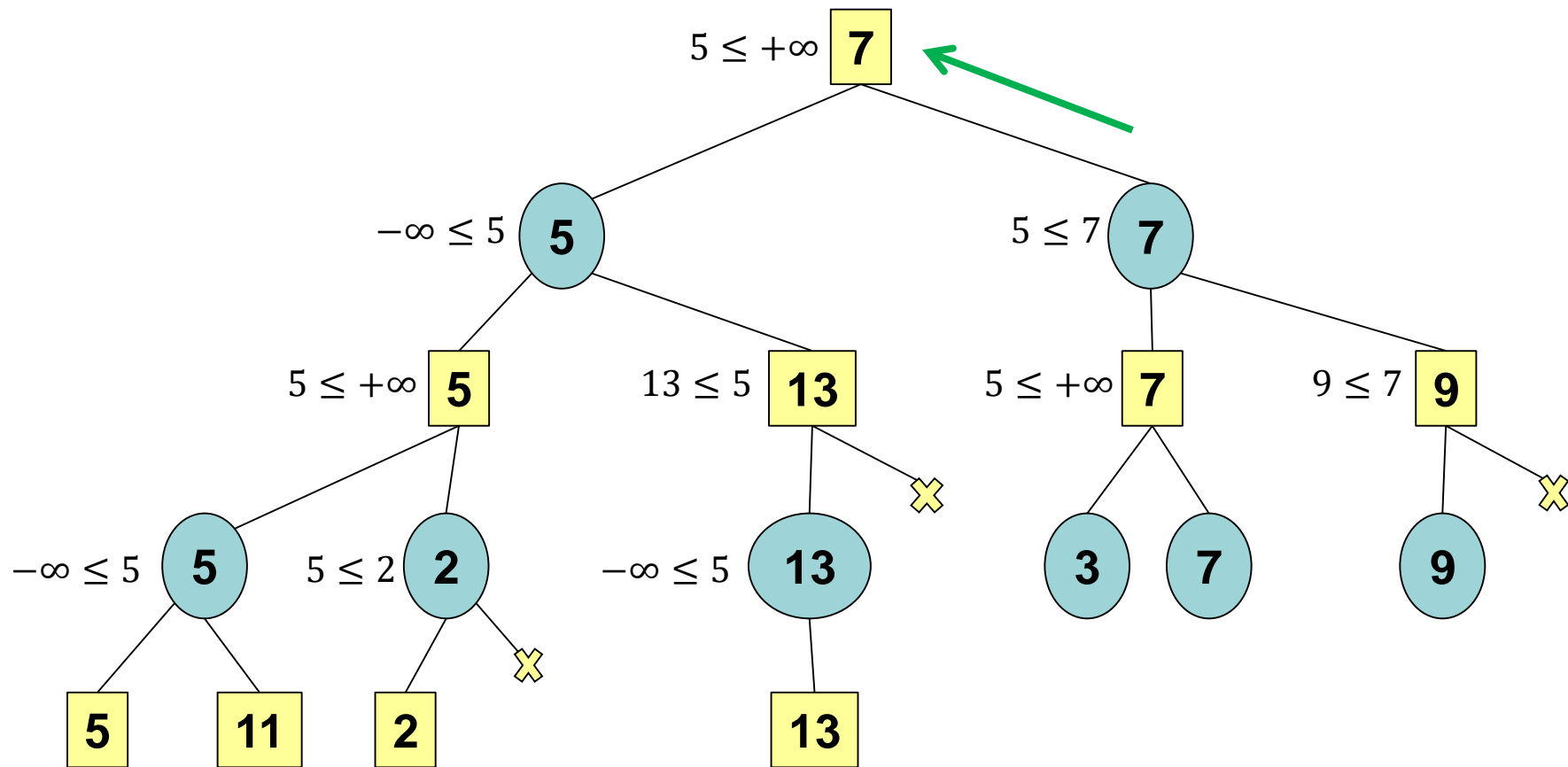
α is the maximum lower bound of possible solutions (MAX plays)
 β is the minimum upper bound of possible solutions (MIN plays)

مثال ۴: گام ۱۷



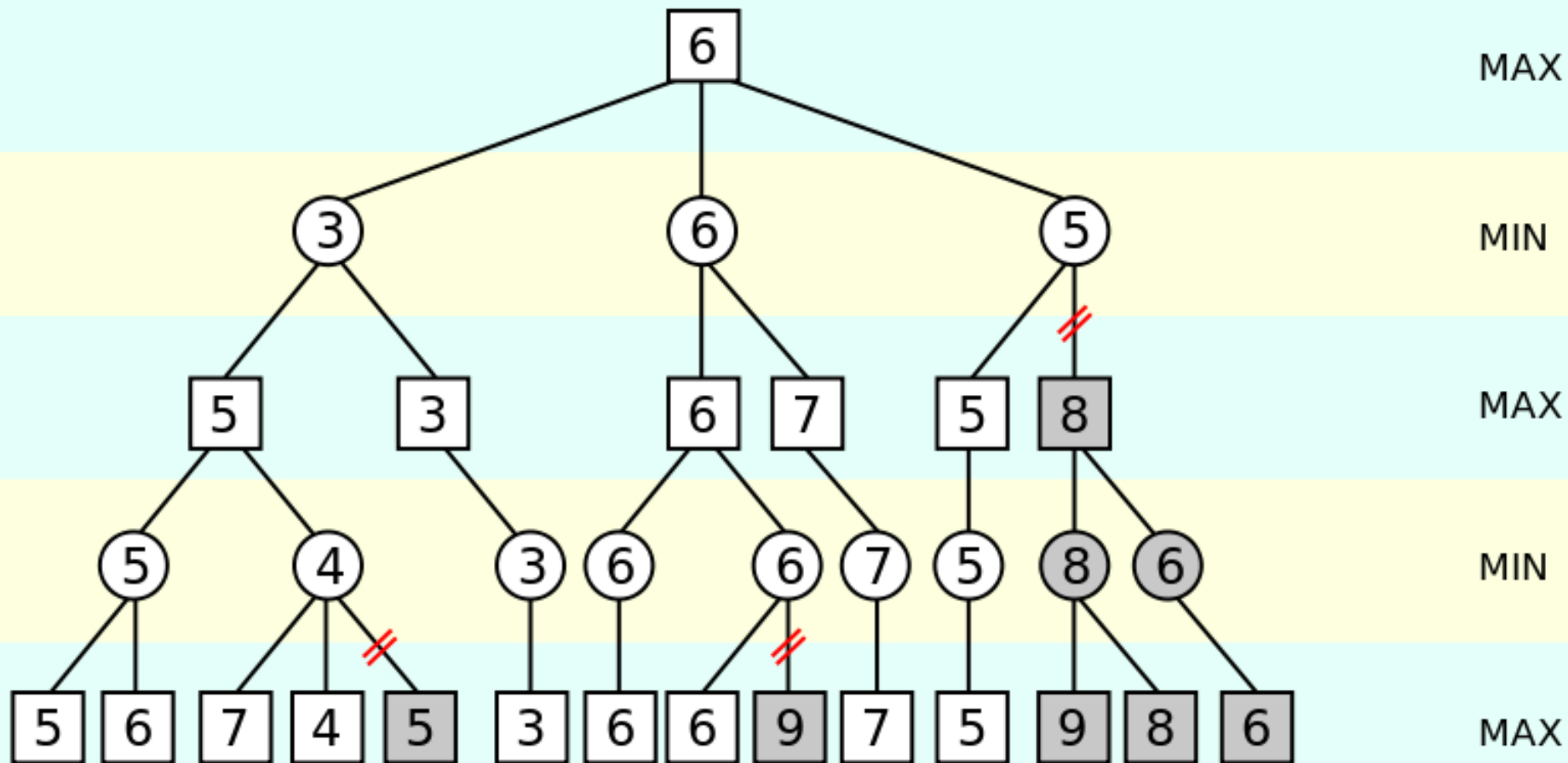
α is the maximum lower bound of possible solutions (MAX plays)
 β is the minimum upper bound of possible solutions (MIN plays)

مثال ۴: گام ۱۸

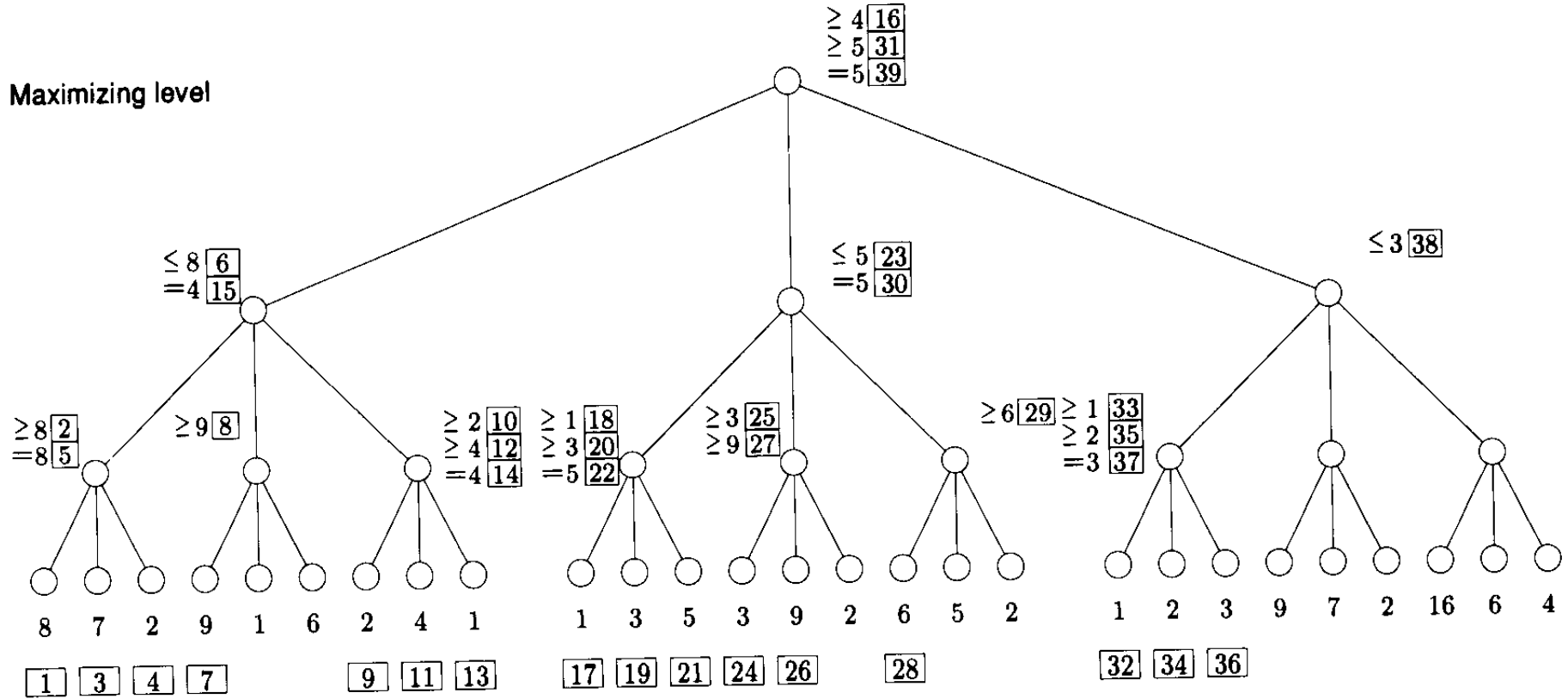


α is the maximum lower bound of possible solutions (MAX plays)
 β is the minimum upper bound of possible solutions (MIN plays)

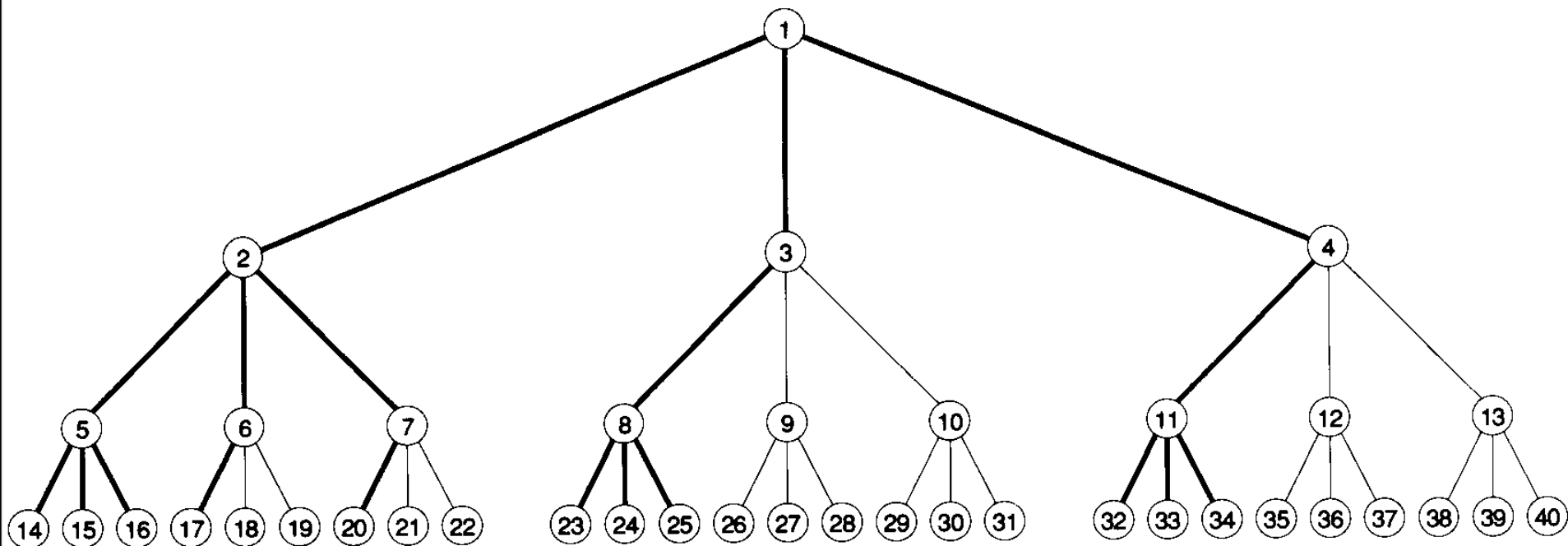
مثال ۵



مثال ۶:



مثال ۷:



an ideal situation from the perspective of the ALPHA-BETA procedure. The ALPHA-BETA procedure cuts the exponent of exponential explosion in half, because not all the adversary's options need to be considered in verifying the left branch choices. In a tree with depth 3 and branching factor 3, the ALPHA-BETA procedure can reduce the number of required static evaluations from 27 to 11.

Some Demos

- <http://www-users.cs.umn.edu/~wetzel/AIDemos/minimax/AIFinalproject.html>