

α - β Pseudocode:

α - β (state, α , β , depth_limit):

base case:

if @ leaf node:

return [state], static eval of state

depending on max/min, static eval)

elif depth_limit == 0:

find heuristic based on max/min

return [state], heuristic, static eval)

if Max:

for each child in state:

$\alpha = \max(\alpha, \alpha\text{-}\beta(\text{child}, \alpha, \beta, \text{depth}-1))$

* if $\alpha \geq \beta$:

break (b/c β will never let α get bigger) - prune

path = path + recurse(child)

static count + recurse(child)

score = max(recurse, score)

return (best + path, maxscore, static)

```
return  $\alpha$ 
if min:
    for each child in state:
         $\beta = \min(\beta, \text{alpha-beta}(\text{child}, \alpha, \beta, \text{depth}+1))$ 
        * if  $\beta \leq \alpha$ :
            break
```

```
path = path + recurse(child)
static_count += recurse(child)
score = max(recurse, score)
return (best_path, max_score, static)
```