

## Minimax

Set  $L = \{ n \}$  //the unexpanded nodes in the tree

```
while(true){
    Let  $x$  be the 1st node on  $L$ .
    if ( $x == n$  && there is a value assigned to it){
        return this value.
        break;
    }else{
        if( $x$  has been assigned a value  $vx$ ){
            let  $p$  be the parent of  $x$  and  $vp$  the value currently assigned to  $p$ .
            if( $p$  is a minimizing node){
                set  $vp = \min(vp, vx)$ .
            }else if ( $p$  is a maximizing node){
                set  $vp = \max(vp, vx)$ .
            }
            Remove  $x$  from  $L$ .
        }else if( $x$  has not been assigned a value and
            (either  $x$  is a terminal node or we have decided not to expand the tree further)){
            compute its value using the evaluation function.
            Leave  $x$  on  $L$ .
        }else{
            if( $x$  is a maximizing node){
                set  $vx$  to be  $-\infty$ .
            }else if ( $x$  is a minimizing node){
                set  $vx$  to be  $+\infty$ .
            }
            Add the children of  $x$  to the front of  $L$ .
        }
    }
}
```