

Re: Chess boards & connections.

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- *From:* "Toshi ikutsu?" <[nospam@xxxxxxxxxx](mailto:nospam@xxxxxxxxxx)>
  - *Date:* Sat, 22 Apr 2006 11:55:31 -0500
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<[dynamics@xxxxxxxxxx](mailto:dynamics@xxxxxxxxxx)> wrote in message  
<news:1145600495.849018.281690@xx>

Toshi ikutsu? wrote:

<[dynamics@xxxxxxxxxx](mailto:dynamics@xxxxxxxxxx)> wrote in message  
<news:1145569228.272184.92380@xx>

Michael Stemper wrote:

In article  
<[114555339.841442.203250@xx](mailto:114555339.841442.203250@xx)>,  
dynamics writes:

Trying to calculate if I can  
write a Chess AI.

I need to define all possible  
boards.

I have a total of 64 different  
pieces, 16 for Black  
and 16 for White to start,  
and since each pawn  
can be promoted, to either a  
Queen or Knight, a

They can't be promoted to a bishop or a  
rook?

LOL, then you'll totally fuck my math, actually  
I have a patch, but you're right ;-).

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what about "in passing" for pawns?  
and castling?

further 16 for B&W's 8  
pawns for another 32.

There are 65 locations on  
the board,  $8*8 + 1$  for  
non-existence called the  
side bar.

So I dimension an Array,  
(64,65) where the 64  
provides the \*serial  
number\* for all possible  
pieces and each of those can  
be in 65 locations,  
providing  $64*65=4160$   
boards.

Nope.

Place the first of the 64 pieces. How many  
choices for a square do  
you have? 65. Now, for each of those  
possibilities, you have 64  
choices  
for placing the second piece. So, two pieces  
already uses up your 41