

```
function [st] = stateFromHand(hand,cardShowing)
%
% Returns the state (a three vector of numbers for a given hand of cards)
%
% [players current sum, dealer showing card, usable ace]
%
% Cards are enoumerated 1:52, such that
%
% 1:13 => A, 2, 3, ..., 10, J, Q, K      (of C)
% 14:26                                     (of D)
%                                           (of H)
%                                           (of S)
%
% Written by:
% --
% John L. Weatherwax                      2007-12-07
%
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%
% Please send comments and especially bug reports to the
% above email address.
%
%-----

[hv,usableAce] = handValue(hand);

cardShowing = mod( cardShowing - 1, 13 ) + 1;

st = [ hv, cardShowing, usableAce ];

return;
```