

p054 CM; P1; P2; H1; H2; b

© Solve Project Euler Problem 54

© using global variable <poker>

©

© <CM> Card Matrix like <poker> or <tpok>

©

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P1, score\_hand " , 1) H1 , 0 ~15±CM

P2, score\_hand " , 1) H2 , 0 15±CM

©H1, ('18, X1' (Fmt P1), (WIN[b+(E10; ]), ('18, X1' (Fmt P2), H2

© See how many hands Player 1 <P1> won.

'Player one won' (+/b, P1>P2) 'hands.'

-----  
S, score\_hand cards; N; S; i; Nd; ' ; EQ

© <cards>: five card string of number and suite pairs

© Return <s> an integer score of the hand.

©

© Format for <cards>: '[n1][suite1] [n2][suite2] ....'

©

© Score is based on a basic value for rank of the hand

© with added points for the high cards of the hand,

© starting with the primary hand and followed by the

© tie breaker cards

© High Card: Highest value card.

© One Pair: Two cards of the same value.

© Two Pairs: Two different pairs.

© Three of a Kind: Three cards of the same value.

© Straight: All cards are consecutive values.

© Flush: All cards of the same suit.

© Full House: Three of a kind and a pair.

© Four of a Kind: Four cards of the same value.

© Straight Flush: All cards are consecutive values of same suit.

©

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© Get a vector of numbers and suites

N, (14%1 0 0)/cards

S, (14%0 1 0)/cards

© Sort the cards

i, '23456789TJQKA' "N

N, N[i]

S, S[i]

Nd, c2dec " N

' , (~1±Nd) - 1±Nd

© Vector of decimal card #s

© Difference between subsequent cards

EQ, +/N°. =N

© # of card repeats

```

© Check for Straight Flush
:if (5=+/S=tS) ^ 4=+/1='
    s, 8E6

© Four of a Kind
:elseif 4=+/4=EQ
    s, 7E6

© Full House
:elseif (3=+/3=EQ) ^ 2=+/2=EQ
    s, 6E6
    N, N["EQ]

© Flush - All one suite
:elseif 5=+/S=tS
    s, 5E6

© Straight
:elseif 4=+/1='
    s, 4E6

© Three of a kind
:elseif 3=+/3=EQ
    s, 3E6
    N, N["EQ]

© Two Pair
:elseif 4=+/2=EQ
    s, 2E6
    N, N["EQ]

© One Pair
:elseif 2=+/2=EQ
    s, 1E6
    N, N["EQ]

:else
    s, 0

:end

s , s + c2dec N

```

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```

d, c2dec h; (Eio
© Convert base 15 number <h> with card characters to a decimal
integer.

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```

(Eio, 0
d, '16f' 0123456789TJQKA' %h

```

-----  
]di spl ay WIN

.....  
# /  
/ WIN /  
,-----,

-----  
]di spl ay tpok

.....  
#2D 3D 4D 5D AC KD QD JD TD 8S/  
/3D 3D 4D 5D 6S 2D 2D AS KS QS/  
/3D 3D 3D 4H 5H AS 2D KS 2D 2D/  
,-----,