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10 rem input data for decks of cards
20 data "1","2","3","4","5","6","7","8","9","T","J","Q","K"
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60 rem Initial variables & set No. games v=?
70 x = 0 : y = 2 : w = 0 : v = 1000
80 dim a$(60) : dim h$(20)
90 rem ordered deck a$
100 for n = 1 to 52
110 read a$(n)
120 next n
130 rem repeat for v decks of cards (No. games)
140 for t = 1 to v
150 rem shuffle by swapping random cards
160 for m = 1 to 52
170 b$ = a$(m)
180 c = rnd(52)+1
190 a$(m) = a$(c)
200 a$(c) = b$
210 next m
220 rem create whole deck string c$
230 for p = 1 to 52
240 c$ = c$+a$(p)
250 next p
260 rem card walk for first 6 cards
270 for r = 1 to 6
280 rem movement for each r
290 k = r
300 d$ = a$(k)
310 if d$ = "2" then p = 2
320 if d$ = "3" then p = 3
330 if d$ = "4" then p = 4
340 if d$ = "5" then p = 5
350 if d$ = "6" then p = 6
360 if d$ = "7" then p = 7
370 if d$ = "8" then p = 8
380 if d$ = "9" then p = 9
390 if d$ = "1" then p = 1
400 if d$ = "T" then p = 1
410 if d$ = "J" then p = 1
420 if d$ = "Q" then p = 1
430 if d$ = "K" then p = 1
440 k = k+p
450 rem check to see if at end of deck
460 if k > 52 then k = k-p : goto 490
470 goto 300
480 rem store final card h$()
490 h$(r) = d$
500 next r
510 rem check all final cards are the same
520 for i = 2 to r-1
530 if h$(1) = h$(i) then y = y+1
540 next i
550 if y = r then w = w+1
560 y = 2
570 c$ = ""
580 next t
590 print "Number of games ";v;"Probability = ";w/v

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