

BLACKJACK (21)

The player places a bet and draws a card. Jack, Queens, and Kings count as 10 and Aces count as 1. The player keeps taking "hits" (drawing cards) until satisfied with the total. If his total exceeds 21 he loses. The machine draws until its total exceeds the player's.

If its total exceeds 21, you win.

If you win, your bet is added to your bankroll and should you lose, your bet is deducted.

The program uses a random number generator to pick the cards where the probabilities of drawing a deuce through an ace are all equal.

NOTE:

This program is based on three HP-65 Users' Library programs: 237A by Duke Castle, 1296A by Gary D. Campbell, and 2024A by Mordecai Schwartz, M.D.

SOLUTION:

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2.654 ST01 Enter seed
50.00 ST02 Enter your bankroll
A 15.00 XCEX Enter your bet and draw
      8. *** Total count after 1st card
      R/S Hit
      18. *** Total after second card
      Stick
B      XCEX Machine plays
      After each card, the fol-
      lowing count totals are
      flashed: 7,8,9,14, 24
55.00 *** You win, bankroll is now
      $65.00
A 15.00 XCEX Bet $15.00 on another game
      1. *** Total count after 1 card
      R/S
      3. *** After 2 cards
      R/S
      12. *** After 3 cards
      R/S
      14. *** After 4 cards
      R/S After 5 cards your total of
      24 is flashed.
50.00 *** You lose-Bankroll is back
      to $50.00
A 20.00 XCEX Now you bet $20.00
      3. ***
      R/S
      5. ***
      R/S
      10. ***
      R/S
      14. ***
      R/S 5 card total is flashed:22
30.00 *** Loss reduces bankroll to
      $30.00
A 10.00 XCEX You bet only $10.00
      10. ***
      R/S
      11. ***
      R/S
      15. *** Decide to stick with a
      15 total
B      XCEX Machine wins again with
      totals of 10,16 and 20
20.00 *** You are left with $20.00

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001	f LBL A	32	25	11
002	STO 6	33	06	
003	0	00		
004	STO 0	33	00	
005	STO 4	33	04	
006	STO 5	33	05	
007	f FIX	31	23	
007	DSP 0	23	00	
008	f LBL 7	31	25	07
009	f GSB 0	31	22	00
010	STO+5	33	61	05
011	2	02		
012	1	01		
013	1	01		
014	RCL 5	34	05	
015	h PAUSE	53	72	
016	g X=Y?	32	51	
017	GTO 9	22	09	
018	g X Y?	32	81	
019	GTO 8	22	08	
020	R/S	84		
021	GTO 7	22	07	
022	f LBL B	31	25	12
023	f GSB 0	31	22	00
024	STO+4	33	61	04
025	2	02		
026	1	01		
027	RCL 4	34	04	
028	h PAUSE	35	72	
029	g X>Y?	32	81	
030	GTO 9	22	09	
031	RCL 5	34	05	
032	h X↔Y	35	52	
033	g X>Y?	32	81	

034	GTO 8	22	08	
035	GTO B	22	12	
036	f LBL 8	31	25	08
037	RCL 6	34	06	
038	CHS	42		
039	STO+2	33	61	02
040	RCL 2	34	02	
041	R/S	84		
042	f LBL 9	31	25	09
043	RCL 6	34	06	
044	STO+2	33	61	02
045	f FIX	31	23	
046	DSP 2	23	02	
047	RCL 2	34	02	
048	R/S	84		
049	f LBL 0	31	25	00
050	1	01		
051	0	00		
052	RCL 1	34	01	
053	h π	35	73	
054	+	61		
055	g x^2	32	54	
056	g FRAC	32	83	
057	STO 1	33	01	
058	1	01		
059	3	03		
060	x	71		
061	1	01		
062	+	61		
063	f INT	31	83	
064	g X>Y?	32	81	
065	h X↔Y	35	52	
066	h RTN	35	22	