

Program Description 1

Program Title BASE BALL

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Program Description, Equations, Variables

THIS IS A VERY COMPETITIVE GAME BETWEEN 2 PEOPLE. AFTER INITIALIZATION YOU MAY EITHER TAKE THE PITCH, (A BALL OR STRIKE WILL RESULT) OR SWING AWAY (IN WHICH CASE YOU WILL GET EITHER AN OUT, SINGLE, DOUBLE, TRIPLE OR HOME RUN.) THE HIT YOU RECEIVE WILL ADVANCE RUNNERS AN APPROPRIATE NUMBER OF BASES. SINGLE 1 BASE, DOUBLE 2 BASES, A TRIPLE 3 BASES, A HOME RUN SCORES ALL RUNNERS. AN OUT WILL KEEP THE RUNNERS WHERE THEY WERE. THE CHANCES FOR SUCCESS ARE AS FOLLOWS.

IF YOU TAKE, 43% OF THE TIME A BALL WILL RESULT
57% OF THE TIME A STRIKE WILL RESULT

4 BALLS ARE A WALK 3 STRIKES ARE AN OUT. AS IN BASEBALL.

IF YOU SWING 68% OF THE TIME YOU WILL BE OUT.
24% OF THE TIME YOU WILL HIT A SINGLE
05% OF THE TIME YOU WILL HIT A DOUBLE
1% OF THE TIME YOU WILL HIT A TRIPLE
2% OF THE TIME A HOME RUN WILL RESULT.

Operating Limits and Warnings

THERE IS 1 MINOR INACCURACY IN THE PROGRAM, ALL WALKS ARE COUNTED AS SINGLES, IN OTHER WORDS A WALK WILL ADVANCE A RUNNER FORCED OR NOT. AT THE END OF 9 INNINGS, THE GAME WILL GO IN AN INFINITE LOOP DISPLAYING THE SCORE CONTINUOUSLY.

This program has been verified only with respect to the numerical example given in *Program Description II*. User accepts and uses this program material AT HIS OWN RISK, in reliance solely upon his own inspection of the program material and without reliance upon any representation or description concerning the program material.

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Sketch(es)	EXPLANATION
	-0.010 0 OUTS 1 MAN ON SECOND See CIRCLED EX. BELOW

Sample Problem(s) STORE SEED .258741369 AND CONSTANTS
 INITIALIZE [A] 0.0 TAKE PITCH [B] 0.1 A STRIKE
 TAKE [B] 1.1 BALL [B] 1.2 1 BALL 2 STRIKES. (2.0 FOR
 EXAMPLE MEANS 2 BALLS NO STRIKES (BALL STRIKE)) [C] SWING
 (2.* -0.010*) 0.00** 0.0) A DOUBLE MAN ON SECOND NO
 SCORE. 2 SIGNIFYS TYPE OF HIT 2 is Double 0 is OUT 1 is
 SINGLE 3 is TRIPLE 4 is A HOME RUN. 0.00 is the SCORE
 PLAYER 1'S SCORE is ON LEFT SIDE OF DISPLAY (EX. 2.03
 MEANS PLAYER 2 LEADS 3-2.) IT STOPS DISPLAYING 0.0
 NO BALLS OR STRIKES FOR NEXT BATTER. [C] SWING (0.* -1.010*
 0.00** 0.0) 1 OUT. [C] SWING (1.* -1.101* 0.00 0.0)
 A SINGLE MEN ON FIRST AND THIRD. [B] TAKE 0.1 [B]
 TAKE 0.2 (GOOD PITCHER! 2 STRIKES 0 BALLS) SWING [C]
 (0.* -2.101* 0.00** 0.0) SWING [E] (4.* -2.000* 3.00**
 0.0) A HOME RUN! NOT BAD! SWING [E] (1.*
 -2.001* 3.00** 0.0) SINGLE. [B] TAKE 0.1 [B] TAKE
 1.1 [B] TAKE 1.2 GIVE ME A BREAK SWING! [E] (0.000000
 -0.5* 3.00* 0.0) ALL ZERO'S MEAN 3 OUTS,
 INNING IS OVER -0.5 shows 1/2 AN INNING IS OVER
 3.00 is the Score 0.0 shows 0 BALLS 0 STRIKES
 FOR BATTER OF TEAM 2. YOUR UP GOOD LUCK!

Reference(s)

* = 5 SECOND PAUSE

** = 1 SECOND PAUSE

User Instructions

00555D

REVIEW
BASEBALL

INIT. TAKE SWING

STEP	INSTRUCTIONS	INPUT DATA/UNITS	KEYS	OUTPUT DATA/UNITS
1	LOAD SIDE 1 AND 2			
2	STORE CONSTANTS :	100	STO B	
		1000	STO C	
		.5	STO E	
3	ALSO STORE A RANDOM Seed			
	X 0<X<1	X	STO D	
4	INITIALIZE		A	0.0
5	B IS FOR TAKING	TAKE	B	
	C IS FOR SWINGING	SWING	C	
6	PLAY UP TO 9 INNINGS AND			
	FOR A NEW GAME CLEAR REGISTERS		F CLRREG	
	AND GO TO STEP 2			
7	THE REVIEW KEY :		F b	
	WILL SHOW THE LAST HIT OF			
	OUT YOU MADE	1.(LP)		
	THE CURRENT BASE SITUATION	-1.100(LP)		
	1 OUT AND 1 MAN ON BASE (THIRD)			
	THE SCORE. 1 RUN FOR PLAYER 2	0.01(SP)		
	THEN IT WILL STOP DISPLAYING			
	THE NUMBER OF BALLS AND	0.2(ST)		
	STRIKES. THIS KEY CAN BE USED			
	TO REVIEW AT ANY STOPPAGE OF			
	THE CALCULATOR. NOT ON A PAUSE.			
	LP MEANS LONG PAUSE 5 SEC.			
	SP MEANS SHORT PAUSE 1 SEC.			
	ST MEANS STOPPED.			
	TO CHANGE ODDS.			
	ON STEP 89/90 IT SAYS 24 INCREASING			
	THE NUMBER INCREASES THE CHANCE			
	OF A SINGLE <u>STEP NO.</u>			
	1-24 IS A SINGLE 89/90			
	25-29 IS A DOUBLE 99/100			
	30-31 IS A HOMERUN 104/105			
	50 IS A TRIPLE (DO NOT CHANGE)			
	FOR EXAMPLE USE			
	26 33 36 WILL INSTEAD OF			
	24 29 31 WILL MAKE IT MORE			
	OF A HITTERS PUEL.			
	21 26 27 MAKES IT A PITCHERS GAME			

STEP	KEY ENTRY	KEY CODE	COMMENTS	STEP	KEY ENTRY	KEY CODE	COMMENTS
001	FLBLA	312511			STO 9	3309	
	FGSBI	312201			STO A	3311	
	RCL B	3412			GTO FD	223112	
	X	71		060	FLBL4	312504	
	FINT	3183			RCL E	3415	
	STO10	3301			STO+5	336105	
	FGSBI	312201			O	00	
	7	07			DSP 9	2309	
	X	71			H PAUSE	3572	
010	FINT	3183			STO 3	3303	
	3	03			STO 7	3307	
	—	51			STO 9	3309	
	STO 2	3302			RCL 5	3405	
	RCL 9	3409		070	CHS	42	
	DSP 1	2301			DSP 1	2301	
	HRTN	3522			F-X-	3184	
	FLBLB	312512			RCL 6	3406	
	RCL 2	3402			DSP 2	2302	
	FX<O	3171			F-X-	3184	
020	GTO O	2200			9	09	
	.	83			RCL 5	3405	
	1	01			GX=Y	3251	
	STO+9	336109			GTO 5	2205	
	RCL 9	3409		080	GTO A	2211	
	GFRAC	3283			FLBL5	312505	
	.	83			RCL 6	3406	
	3	03			H PAUSE	3572	
	GX=Y	3251			GTO 5	2205	
	GTO 2	2202			FLBLC	312513	
030	GTO A	2211			O	00	
	FLBL1	312501			STO 9	3309	
	H Y	3573			RCL 1	3401	
	RCL D	3414			2	02	TO CHANGE SINGLES
	+	61		090	4	04	
	5	05			GX7Y	3281	
	H Y X	3563			GTO 3	2203	
	GFRAC	3283			RCL 1	3401	
	STO D	3314			5	05	DO NOT CHANGE TRIPLES
	HRTN	3522			O	00	
040	FLBL O	312500			GX=Y	3251	
	1	01			GTO 7	2207	
	STO+9	336109			RCL 1	3401	
	RCL 9	3409			2	02	TO CHANGE DOUBLES
	FINT	3183		100	9	09	
	4	04			GX7Y	3281	
	GX=Y	3251			GTO 6	2206	
	GTO 3	2203			RCL 1	3401	
	GTO A	2211			3	03	TO CHANGE HOMERUNS
	FLBL 2	312502			1	01	
050	1	01			GX7Y	3281	
	STO+3	336103			GTO 8	2208	
	RCL 3	3403			GTO 2	2202	
	3	03			FLBL 3	312503	
	GX=Y	3251		110	O	00	
	GTO 4	2204			STO 9	3309	
	O	00			RCL 7	3407	

REGISTERS

02 R. SEED	1 HIT or OUT	2 B? or S?	3 R. SEED	4 USED	5 SCORE	6 SCORE	7 USED	8 USED	9 B.S
S0	S1	S2	S3	S4	S5	S6	S7	S8	S9
A TYPE OF HIT	B 100	C 1000	D R. SEED	E 0.50	F USED				

STEP	KEY ENTRY	KEY CODE	COMMENTS	STEP	KEY ENTRY	KEY CODE	COMMENTS
	1	01			CHS	42	
	0	00		170	F-X-	3184	
	X	71			RCL 6	3406	
	1	01			DSP 2	2302	
	+	61			H PAUSE	3572	
	STO 7	3307			GTO A	2211	
	1	01			GLBLfa	322511	
120	STO A	3311			RCL 7	3407	
	GTO Fc	223113			RCL C	3413	
	FLBL 6	312506			÷	81	
	RCL 7	3407			F INT	3183	
	RCLB	3412		180	STO 8	3308	
	X	71			HLSTX	3582	
	1	01			GFRAC	3283	
	0	00			HSTI	3533	
	+	61			RCL C	3413	
	STO 7	3307			X	71	
130	2	02			STO 7	3307	
	STO A	3311			3	03	
	GTO Fc	223113			STO 4	3304	
	FLBL 7	312507			GLBLfd	322514	
	RCL 7	3407		190	RCL 8	3408	
	RCL C	3413			RCL 4	3404	
	X	71			G10 ^x	3253	
	RCL B	3412			÷	81	
	+	61			F INT	3183	
	STO 7	3307			STO +0	336100	
140	3	03			HLSTX	3582	
	STO A	3311			H X↔Y	3552	
	GTO Fc	223113			—	51	
	FLBL 8	312508			RCL 4	3404	
	RCL 7	3407		200	G10 ^x	3253	
	4	04			X	71	
	G10 ^x	3253			STO 8	3308	
	X	71			1	01	
	RCL C	3413			STO -4	335104	
	+	61			RCL 4	3404	
150	STO 7	3307			FX≠0	3161	
	4	04			FX>0	3181	
	STO A	3311			GTO fd	223114	
	GLBLFc	322513			RCL 5	3405	
	RCL 7	3407		210	GFRAC	3283	
	RCL C	3413			RCL E	3415	
	G X↔Y	3271			G X=Y	3251	
	GTO fa	223111			G-GSBfe	322215	
	GLBLfb	322512			RCL 0	3400	
	DSP 0	2300			STO +6	336106	
160	RCL A	3411			0	00	
	F-X-	3184			STO 0	3300	
	RCL 7	3407			GTO fb	223112	
	RCL C	3413			GLBLfe	322515	
	÷	81		220	RCL 0	3400	
	HSTI H STI 3533 ← H STI				RCL B	3412	
	DSP 3	2303			÷	81	
	RCL 3	3403			STO 0	3300	
	+	61			H RTN	3522	

LABELS					FLAGS	SET STATUS		
A INIT.	B TAKE	C SWING	D N.U	E N.U	0	FLAGS	TRIG	DISP
a USED	b USED	c USED	d USED	e DIVISION	1	ON OFF		
0 USED	1 Random Seed	2 USED	3 USED	4 USED	2	0 ☐ ☒	DEG ☒	FIX ☒
5 USED	6 USED	7 USED	8 USED	9 N.U	3	1 ☐ ☒	GRAD ☐	SCI ☐
						2 ☐ ☒	RAD ☐	ENG ☐
						3 ☐ ☒		n 0