

# Program Description I

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## Program Description, Equations, Variables

THIS GAME GIVES YOU MOST OF THE OPTIONS INVOLVING PLAYS AND STRATEGY. YOU ARE ALLOWED 3 PLAYS. RUN WHICH 93% OF THE TIME WILL GAIN BETWEEN 0 AND 5 YARDS 5% OF THE TIME 0 TO 50 YARDS 2% OF THE TIME A FUMBLE WILL RESULT WHICH GIVES THE OPPONENT THE BALL AT THE LINE OF SCRIMMAGE. SHORT PASS WHICH 46% OF THE TIME WILL BE INCOMPLETE 50% OF THE TIME IT WILL BE COMPLETE FOR BETWEEN 1 AND 20 YARDS. 4% OF THE TIME IT WILL BE INTERCEPTED AND THE OPPONENT WILL TAKE OVER AT A RANDOM SPOT ON THE FIELD. LONG PASS WHICH 70% OF THE TIME WILL BE INCOMPLETE 20% OF THE TIME COMPLETE FOR BETWEEN 1 AND 100 YARDS. 10% OF THE TIME IT WILL BE INTERCEPTED AND THE OPPONENT WILL TAKE OVER AT A RANDOM SPOT ON THE FIELD.

## Operating Limits and Warnings

AFTER A MISSED POINT-AFTER TOUCHDOWN IT DISPLAYS 1ST DOWN AT THE OPPONENT'S 20. JUST IGNORE IT AND KICK OFF AFTER YOUR <sup>POINT AFTER</sup> TOUCHDOWN, JUST AS YOU KICK OFF AFTER A FIELD GOAL OR AT THE END OF THE HALF OR START OF THE GAME! ALSO BOTH TEAMS MOVE FROM 0 TO 100.

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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# Program Description II

Sketch(es)

←  
HOME TEAM OR (+) TEAM

100 90 80 70 60 50 40 30 20 10 0

HP FIELD

0 10 20 30 40 50 60 70 80 90 100  
→

VISITORS OR (-) TEAM

Sample Problem(s) STORE CONSTANTS AND SEED .111222333

STOA. See USER INSTRUCTIONS FOR EXPLANATIONS IN  
DETAIL. KICKOFF TO HOME TEAM [Fa] 1.44  
(DOWN.YARDLINE) RUN [B] 2.46 GAIN OF 2 SHORT PASS  
[C] 3.50 GAIN OF 4 [RCL 8] 4 YDS NEEDED FOR A  
FIRST DOWN [Fd] 3.50 Fd RESTORES (DOWN.YARDLINE  
DISPLAY) SHORT PASS [C] 4.50 INCOMPLETE. PUNT [fb]  
-1.43 ROTTEN PUNT! ONLY 7 YRDS TOTAL. [RCL 0] 5.00,  
4 PLAYS USED UP. 30 PER QUARTER. LONG PASS [D] 0.06\*  
TOUCHDOWN Bomb 1 [E] P.A.T IS GOOD 0.07\*  
KICKOFF TO HOME TEAM [Fa] 1.16 LONG PASS [D]  
2.16 INCOMPLETE. LONG PASS [D] 3.16 SHORT PASS [C]  
1.33 1ST DOWN GAIN OF 17 LONG PASS [D] 6.07\*  
TOUCHDOWN 1 [E] 7.07\* TIE GAME. KICKOFF TO

Solution(s) VISITORS [A] -1.44 RUN [B] -2.45 [RCL 8]  
9 YARDS FOR A FIRST DOWN RUN [B] -3.47 GAIN OF 2  
[RCL 0] 1 PLAYS USED UP. [Fd] -3.47 RUN [B] -4.47  
NO GAIN. PUNT [fb] 1.15 RUN [B] 2.15 NO GAIN  
RUN [B] 1.27 GAIN OF 12 SHORT PASS [C] 2.27  
RUN [B] 3.28 SHORT PASS [C] 1.44 SHORT PASS [C]  
1.54 RUN [B] 2.56 RUN [B] 3.58 [RCL 8] 6 YDS  
FOR A FIRST DOWN. RUN [B] 4.60. FIELD GOAL 3 [E]  
-1.\* NO GOOD -1.20 VISITORS TAKEOVER AT THE 20

Reference(s) RUN [B] -2.23 SHORT PASS [C] -1.40 RUN [B]  
-2.43 RUN [B] -3.43 LONG PASS [D] -1.\* INTERCEPTION  
1.93 HOME TEAM TAKES OVER 7 YARDS FROM A TOUCHDOWN  
[B] RUN 13.07 SCORE! 1 [E] 14.07 KICKOFF TO  
VISITORS [A] -1.29 RUN [B] -1.41 RUN [B] -1.79 RUN [B]  
-1.91. RUN [B] 1.0000000 \* -2.96 END OF QUARTER 1

\* = 5 SECOND PAUSE

|   |             |                                                                          |
|---|-------------|--------------------------------------------------------------------------|
| 1 | KOTO H PUNT | REVIEW                                                                   |
| 2 | KOTO V RUN  | SHORT PASS    LONG PASS    1= PAT<br>PASS            PASS        3= F.G. |

| STEP | INSTRUCTIONS                                                           | INPUT DATA/UNITS | KEYS                                              | OUTPUT DATA/UNITS |
|------|------------------------------------------------------------------------|------------------|---------------------------------------------------|-------------------|
| 1.   | LOAD SIDE 1 AND 2                                                      |                  | <input type="checkbox"/> <input type="checkbox"/> |                   |
| 2.   | STORE CONSTANTS                                                        | 100              | STO 3                                             |                   |
|      |                                                                        | 10               | STO C                                             |                   |
|      |                                                                        | 50               | h STI                                             |                   |
|      |                                                                        | 80               | STO E                                             |                   |
| 3    | STORE RANDOM Seed X                                                    | 0LX<1            | STO A                                             |                   |
| 4    | KICKOFF FROM 35' TO VISITORS                                           |                  | A                                                 |                   |
|      | 15 TO 50 YRD NET. TO HOME TEAM                                         |                  | f a                                               |                   |
|      | NOTE A NEGATIVE SIGN BEFORE                                            |                  |                                                   |                   |
|      | (DOWN. YARDLINE) MEANS VISITORS                                        |                  |                                                   |                   |
|      | HAVE POSSESSION. EX -2.30                                              |                  |                                                   |                   |
|      | VISITORS BALL SECOND DOWN AT                                           |                  |                                                   |                   |
|      | THE 30 YARD LINE                                                       |                  |                                                   |                   |
| 5    | TO RUN. A-1* MEANS FUMBLE. OTHER TEAM TAKES OVER AT LINE OF SCRIMMAGE. |                  | B                                                 |                   |
| 6    | SHORT PASS A-1* MEANS INTER-                                           |                  | C                                                 |                   |
| 7    | LONG PASS CEPTION. OTHER TEAM TAKES OVER AT RANDOM SPOT.               |                  | D                                                 |                   |
| 8    | TO PUNT                                                                |                  | f b                                               |                   |
|      | NOTE PUNT WILL GO FROM                                                 |                  |                                                   |                   |
|      | 30 TO 65 YARDS AND BE                                                  |                  |                                                   |                   |
|      | RETURNED 0 TO 30 YARDS,                                                |                  |                                                   |                   |
|      | ONLY NET RESULT IS SHOWN                                               |                  |                                                   |                   |
| 9    | FOR A FIELD GOAL PRESS                                                 | 3                | E                                                 |                   |
|      | A-1.0* MEANS NO GOOD OTHER                                             |                  |                                                   |                   |
|      | TEAM TAKES OVER ON 20                                                  |                  |                                                   |                   |
|      | IF THE SCORE IS DISPLAYED                                              |                  |                                                   |                   |
|      | THE KICK IS GOOD, KICKOFF                                              |                  |                                                   |                   |
| 10   | TO POINT AFTER TOUCHDOWN                                               | 1                | E                                                 |                   |
|      | A-1.* MEANS NO GOOD. IGNORE                                            |                  |                                                   |                   |
|      | 1.20 OR -1.20 AND KICKOFF                                              |                  |                                                   |                   |
|      | IF THE SCORE IS DISPLAYED                                              |                  |                                                   |                   |
|      | THE KICK IS GOOD, KICKOFF                                              |                  |                                                   |                   |
| 11   | TO REVIEW DOWN AND                                                     |                  |                                                   |                   |
|      | YARDLINE PRESS.                                                        | <del>1</del>     | f d                                               | DOWN.YD           |
| 12   | TIMING SECTION                                                         |                  |                                                   |                   |
|      | A PLAY (TIME WISE)                                                     |                  |                                                   |                   |
|      | IS USED UP ON A KICKOFF                                                |                  |                                                   |                   |
|      | AND ON A RUNNING PLAY OR                                               |                  |                                                   |                   |
|      | PASS NOT TURNED OVER. (FUMBLES                                         |                  |                                                   |                   |
|      | AND INTERCEPTIONS DON'T COUNT)                                         |                  |                                                   |                   |



| STEP             | KEY ENTRY    | KEY CODE | COMMENTS | STEP | KEY ENTRY        | KEY CODE | COMMENTS |
|------------------|--------------|----------|----------|------|------------------|----------|----------|
| 001              | FLBLA        | 312511   |          |      | 1                | 01       |          |
|                  | HSFO         | 355100   |          |      | STO+2            | 336102   |          |
|                  | FLBLO        | 312500   |          |      | STO+0            | 336100   |          |
|                  | RCL3         | 3403     |          | 060  | GGSBfe           | 322215   |          |
|                  | FGSBI        | 312201   |          |      | RCL2             | 3402     |          |
|                  | 3            | 03       |          |      | 5                | 05       |          |
|                  | 5            | 05       |          |      | G X > Y          | 3281     |          |
|                  | X            | 71       |          |      | GTO fd           | 223114   |          |
|                  | H RCI        | 3534     |          |      | FLBL5            | 312505   |          |
| 010              | +            | 61       |          |      | RCL1             | 3401     |          |
|                  | -            | 51       |          |      | RCL3             | 3403     |          |
|                  | FINT         | 3183     |          |      | -                | 51       |          |
|                  | STOI         | 3301     |          |      | HABS             | 3564     |          |
|                  | 1            | 01       |          | 070  | STOI             | 3301     |          |
|                  | STO+0        | 336100   |          |      | HF?0             | 357100   |          |
|                  | STO2         | 3302     |          |      | GTO8             | 2208     |          |
|                  | GGSBfe       | 322215   |          |      | HSFO             | 355100   |          |
|                  | RCLC         | 3413     |          |      | GTO9             | 2209     |          |
|                  | STO8         | 3308     |          |      | FLBL8            | 312508   |          |
| 020              | GTO fd       | 223114   |          |      | HCFO             | 356100   |          |
|                  | FLBL1        | 312501   |          |      | FLBL9            | 312509   |          |
|                  | H T          | 3573     |          |      | 1                | 01       |          |
|                  | RCLA         | 3411     |          |      | STO2             | 3302     |          |
|                  | +            | 61       |          | 080  | RCLC             | 3413     |          |
|                  | 5            | 05       |          |      | STO8             | 3308     |          |
|                  | H Y X        | 3563     |          |      | GLBLfd           | 322514   |          |
|                  | GFRAC        | 3283     |          |      | RCL1             | 3401     |          |
|                  | STOA         | 3311     |          |      | RCL3             | 3403     |          |
|                  | HRTN         | 3522     |          |      | =                | 81       |          |
| 030              | FLBLB        | 312512   |          |      | RCL2             | 3402     |          |
|                  | °            | 83       |          |      | +                | 61       |          |
|                  | 9            | 09       |          |      | HF?0             | 357100   |          |
|                  | 5            | 05       |          |      | chs              | 42       |          |
|                  | FGSBI        | 312201   |          | 090  | HRTN             | 3522     |          |
|                  | G X < Y      | 3271     |          |      | FLBL2            | 312502   |          |
|                  | HSF2         | 355102   |          |      | RCLB             | 3412     |          |
|                  | H RCI        | 3534     |          |      | HF?0             | 357100   |          |
|                  | H 1/x        | 3562     |          |      | FGSB8            | 312208   |          |
|                  | G X > Y      | 3281     |          |      | STO+4            | 336104   |          |
| 040              | GTO7         | 2207     |          |      | RCL4             | 3404     |          |
|                  | H RCI        | 3534     |          |      | F <del>max</del> | 3184     |          |
|                  | FGSBI        | 312201   |          |      | HRTN             | 3522     |          |
|                  | H F?02       | 357102   |          |      | FLBL8            | 312508   |          |
|                  | 6            | 06       |          | 100  | RCL3             | 3403     |          |
|                  | X            | 71       |          |      | =                | 81       |          |
|                  | FLBL6        | 312506   |          |      | HRTN             | 3522     |          |
|                  | FINT         | 3183     |          |      | GLBLFe           | 322515   |          |
|                  | STO+1        | 336101   |          |      | RCL0             | 3400     |          |
|                  | STO-8        | 335108   |          |      | 3                | 03       |          |
| 050              | 6            | 06       |          |      | 0                | 00       |          |
|                  | STOB         | 3312     |          |      | G X ≠ Y          | 3261     |          |
|                  | RCL1         | 3401     |          |      | HRTN             | 3522     |          |
|                  | RCL3         | 3403     |          |      | 1                | 01       |          |
|                  | G X < Y      | 3271     |          | 110  | STO+7            | 336107   |          |
| GTO <del>6</del> | <del>G</del> | 2202     |          |      | RCL7             | 3407     |          |
|                  | FGSB4        | 312204   |          |      | G X = Y          | 3251     |          |

## REGISTERS

|        |                     |        |       |         |    |    |           |              |        |
|--------|---------------------|--------|-------|---------|----|----|-----------|--------------|--------|
| 0 TIME | 1 YARDline          | 2 DOWN | 3 100 | 4 SCORE | 5  | 6  | 7 QUARTER | 8 YROS TO GO | 9 USED |
| S0     | S1                  | S2     | S3    | S4      | S5 | S6 | S7        | S8           | S9     |
| A Seed | B SCORE IF PLAY TD. | C 10   | D     | E 80    | F  | G  | H         | I 50         | J      |

| STEP | KEY ENTRY | KEY CODE | COMMENTS | STEP | KEY ENTRY | KEY CODE | COMMENTS |
|------|-----------|----------|----------|------|-----------|----------|----------|
|      | GTO 8     | 2208     |          |      | GX7Y      | 3281     |          |
|      | 3         | 03       |          | 170  | GTO 3     | 2203     |          |
|      | GX=Y      | 3251     |          |      | FGSB1     | 312201   |          |
|      | GTO 8     | 2208     |          |      | RCL 3     | 3403     |          |
|      | 0         | 0        |          |      | X         | 71       |          |
|      | STO 2     | 3302     |          |      | GTO 6     | 2206     |          |
|      | FLBL 8    | 312508   |          |      | FLBLE     | 312515   |          |
| 120  | RCL 7     | 3407     |          |      | STOB      | 3312     |          |
|      | DSP 9     | 2309     |          |      | 1         | 01       |          |
|      | F-X-      | 3184     |          |      | GX=Y      | 3251     |          |
|      | DSP 2     | 2302     |          | 180  | FGSB 8    | 312208   |          |
|      | 0         | 00       |          |      | RCL 3     | 3403     |          |
|      | STO 0     | 3300     |          |      | FGSB1     | 312201   |          |
|      | HRTN      | 3522     |          |      | HRCI      | 3534     |          |
|      | FLBL C    | 312513   |          |      | X         | 71       |          |
|      | FGSB1     | 312201   |          |      | -         | 51       |          |
|      | STO 9     | 3309     |          |      | RCL 1     | 3401     |          |
| 130  | .         | 83       |          |      | GX7Y      | 3281     |          |
|      | 4         | 04       |          |      | GTO 2     | 2202     |          |
|      | 6         | 06       |          |      | 1         | 01       |          |
|      | GX7Y      | 3281     |          | 190  | CHS       | 42       |          |
|      | GTO 6     | 2206     |          |      | F-X-      | 3184     |          |
|      | RCL 9     | 3409     |          |      | RCL E     | 3415     |          |
|      | .         | 83       |          |      | STO 1     | 3301     |          |
|      | 5         | 05       |          |      | GTO 5     | 2205     |          |
|      | GX7Y      | 3281     |          |      | FLBL 8    | 312508   |          |
|      | GTO 3     | 2203     |          |      | 9         | 09       |          |
| 140  | FGSB1     | 312201   |          |      | 6         | 06       |          |
|      | 2         | 02       |          |      | STO 1     | 3301     |          |
|      | 0         | 00       |          |      | HRTN      | 3522     |          |
|      | X         | 71       |          |      | GLBLFB    | 322512   |          |
|      | GTO 6     | 2206     |          | 200  | FGSB1     | 312201   |          |
|      | FLBL 3    | 312503   |          |      | 6         | 06       |          |
|      | FGSB1     | 312201   |          |      | 5         | 05       |          |
|      | 9         | 09       |          |      | X         | 71       |          |
|      | 9         | 09       |          |      | FINT      | 3183     |          |
|      | X         | 71       |          |      | STO+1     | 336101   |          |
| 150  | FINT      | 3183     |          |      | RCL 1     | 3401     |          |
|      | 1         | 01       |          |      | RCL 3     | 3403     |          |
|      | +         | 61       |          |      | GX7Y      | 3281     |          |
|      | STO 1     | 3301     |          |      | GTO 5     | 2205     |          |
|      | FLBL 7    | 312507   |          | 210  | RCL E     | 3415     |          |
|      | 1         | 01       |          |      | STO 1     | 3301     |          |
|      | CHS       | 42       |          |      | GTO 5     | 2205     |          |
|      | F-X-      | 3184     |          |      | FLBL 4    | 312504   |          |
|      | GTO 5     | 2205     |          |      | RCL 8     | 3408     |          |
|      | FLBL D    | 312514   |          |      | FX70      | 3181     |          |
| 160  | FGSB1     | 312201   |          |      | HRTN      | 3522     |          |
|      | STO 9     | 3309     |          |      | RCL C     | 3413     |          |
|      | .         | 83       |          |      | STO 8     | 3308     |          |
|      | 7         | 07       |          |      | 0         | 00       |          |
|      | GX7Y      | 3281     |          | 220  | STO 2     | 3302     |          |
|      | GTO 6     | 2206     |          |      | HRTN      | 3522     |          |
|      | RCL 9     | 3409     |          |      | GLBLFa    | 322511   |          |
|      | .         | 83       |          |      | HCF0      | 356100   |          |
|      | 8         | 08       |          |      | GTO 0     | 2200     |          |

## LABELS

## FLAGS

## SET STATUS

| A | KO TO V   | B | RUN         | C | S.PASS | D | L.PASS       | E | FF PAT = 3 | F | HOME OR V | FLAGS                                                          | TRIG                          | DISP                         |
|---|-----------|---|-------------|---|--------|---|--------------|---|------------|---|-----------|----------------------------------------------------------------|-------------------------------|------------------------------|
| a | KO TO H   | b | PUNT        | c |        | d | Review       | e | Time?      | 1 |           | ON OFF                                                         | DEG                           | FIX                          |
| 0 | Home?     | 1 | RANDOM      | 2 | SCORE  | 3 | INTERCEPTION | 4 | FIRST DOWN | 2 |           | 0 <input type="checkbox"/> <input checked="" type="checkbox"/> | GRAD <input type="checkbox"/> | SCI <input type="checkbox"/> |
| 5 | TURN OVER | 6 | PLAY RESULT | 7 | FUMBLE | 8 | USED         | 9 | FLG CHNG   | 3 |           | 1 <input type="checkbox"/> <input checked="" type="checkbox"/> | RAD <input type="checkbox"/>  | ENG <input type="checkbox"/> |
|   |           |   |             |   |        |   |              |   |            |   |           | 2 <input type="checkbox"/> <input checked="" type="checkbox"/> |                               | n 2                          |
|   |           |   |             |   |        |   |              |   |            |   |           | 3 <input type="checkbox"/> <input checked="" type="checkbox"/> |                               |                              |