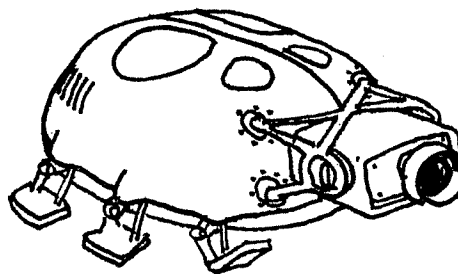# Bug

The object of this game is to finish your drawing of a bug before the computer finishes.

You and the computer roll a die alternately with each number standing for a part of the bug. You must add the parts in the right order; in other words, you cannot have a neck until you have a body, you cannot have a head until you have a neck, and so on. After each new part has been added, you have the option of seeing pictures of the two bugs.

If you elect to see all the pictures, this program has the ability of consuming well over six feet of terminal paper per run. We can only suggest recycling the paper by using the other side.

Brian Leibowitz wrote this program while in the 7th grade at Harrison Jr-Sr High School in Harrison, New York.

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                    BUG
CREATIVE COMPUTING  MORRISTOWN, NEW JERSEY


THE GAME BUG
I HOPE YOU ENJOY THIS GAME.

DO YOU WANT INSTRUCTIONS? YES
THE OBJECT OF BUG IS TO FINISH YOUR BUG BEFORE I FINISH
MINE.  EACH NUMBER STANDS FOR A PART OF THE BUG BODY.
I WILL ROLL THE DIE FOR YOU, TELL YOU WHAT I ROLLED FOR YOU
WHAT THE NUMBER STANDS FOR, AND IF YOU CAN GET THE PART.
IF YOU CAN GET THE PART I WILL GIVE IT TO YOU.
THE SAME WILL HAPPEN ON MY TURN.
IF THERE IS A CHANGE IN EITHER BUG I WILL GIVE YOU THE
OPTION OF SEEING THE PICTURES OF THE BUGS.
THE NUMBERS STAND FOR PARTS AS FOLLOWS:
NUMBER      PART        NUMBER OF PART NEEDED
1           BODY            1
2           NECK            1
3           HEAD            1
4           FEELERS         2
5           TAIL            1
6           LEGS            6


YOU ROLLED A  1
1=BODY
YOU NOW HAVE A BODY.
I ROLLED A 4
4=FEELERS
I DO NOT HAVE A HEAD.
DO YOU WANT THE PICTURES? YES
*****YOUR BUG*****


   BBBBBBBBBBBB
   B          B
   B          B
   BBBBBBBBBBBB
```

```
I ROLLED A 6
6=LEGS
I NOW HAVE 4 LEGS.
DO YOU WANT THE PICTURES? NO
YOU ROLLED A  1
1=BODY
YOU DO NOT NEED A BODY.
I ROLLED A 3
3=HEAD
I DO NOT NEED A HEAD.
YOU ROLLED A  1
1=BODY
YOU DO NOT NEED A BODY.
I ROLLED A 1
1=BODY
I DO NOT NEED A BODY.
YOU ROLLED A  5
5=TAIL
YOU ALREADY HAVE A TAIL.
I ROLLED A 1
1=BODY
I DO NOT NEED A BODY.
YOU ROLLED A  5
5=TAIL
YOU ALREADY HAVE A TAIL.
I ROLLED A 6
6=LEGS
I NOW HAVE 5 LEGS.
DO YOU WANT THE PICTURES? NO
YOU ROLLED A  5
5=TAIL
YOU ALREADY HAVE A TAIL.
I ROLLED A 4
4=FEELERS
I GET A FEELER.
DO YOU WANT THE PICTURES? NO
YOU ROLLED A  2
2=NECK
YOU DO NOT NEED A NECK.
I ROLLED A 2
2=NECK
I DO NOT NEED A NECK.
YOU ROLLED A  4
4=FEELERS
YOU DO NOT HAVE A HEAD.
I ROLLED A 1
1=BODY
I DO NOT NEED A BODY.
YOU ROLLED A  2
2=NECK
YOU DO NOT NEED A NECK.
I ROLLED A 3
3=HEAD
I DO NOT NEED A HEAD.
YOU ROLLED A  5
5=TAIL
YOU ALREADY HAVE A TAIL.
I ROLLED A 5
5=TAIL
I DO NOT NEED A TAIL.
YOU ROLLED A  6
6=LEG
YOU NOW HAVE  3  LEGS.
I ROLLED A 2
2=NECK
I DO NOT NEED A NECK.
```

```
3=HEAD
YOU NEEDED A HEAD.
I ROLLED A 3
3=HEAD
I DO NOT NEED A HEAD.
DO YOU WANT THE PICTURES? NO
YOU ROLLED A  5
5=TAIL
YOU ALREADY HAVE A TAIL.
I ROLLED A 5
5=TAIL
I DO NOT NEED A TAIL.
YOU ROLLED A  2
2=NECK
YOU DO NOT NEED A NECK.
I ROLLED A 6
6=LEGS
I NOW HAVE 6 LEGS.
MY BUG IS FINISHED.
DO YOU WANT THE PICTURES? YES
*****YOUR BUG*****


            HHHHHHH
            H     H
            H O O H
            H     H
            H  V  H
            HHHHHHH
               N N
               N N
      BBBBBBBBBBBBB
      B             B
      B             B
TTTTTB             B
      BBBBBBBBBBBBB
        L L L
        L L L




******MY BUG******


                F F
                F F
                F F
                F F
              HHHHHHH
              H     H
              H O O H
              H     H
              H  V  H
              HHHHHHH
                 N N
                 N N
        BBBBBBBBBBBBB
        B             B
        B             B
  TTTTTB             B
        BBBBBBBBBBBBB
          L L L L L L
          L L L L L L
I HOPE YOU ENJOYED THE GAME, PLAY IT AGAIN SOON!!
```

```
10 PRINT TAB(34);"BUG"
20 PRINT TAB(15);"CREATIVE COMPUTING  MORRISTOWN, NEW JERSEY"
30 PRINT:PRINT:PRINT
40 REM
50 A=0: B=0: H=0: L=0: N=0: P=0: Q=0: R=0: S=0: T=0: U=0: V=0: Y=0
60 PRINT "THE GAME BUG
70 PRINT "I HOPE YOU ENJOY THIS GAME."
80 PRINT
90 PRINT "DO YOU WANT INSTRUCTIONS";
100 INPUT Z$
110 IF Z$="NO" THEN 300
120 PRINT "THE OBJECT OF BUG IS TO FINISH YOUR BUG BEFORE I FINISH"
130 PRINT "MINE.  EACH NUMBER STANDS FOR A PART OF THE BUG BODY."
140 PRINT "I WILL ROLL THE DIE FOR YOU, TELL YOU WHAT I ROLLED FOR YOU"
150 PRINT "WHAT THE NUMBER STANDS FOR, AND IF YOU CAN GET THE PART."
160 PRINT "IF YOU CAN GET THE PART I WILL GIVE IT TO YOU."
170 PRINT "THE SAME WILL HAPPEN ON MY TURN."
180 PRINT "IF THERE IS A CHANGE IN EITHER BUG I WILL GIVE YOU THE"
190 PRINT "OPTION OF SEEING THE PICTURES OF THE BUGS."
200 PRINT "THE NUMBERS STAND FOR PARTS AS FOLLOWS:"
210 PRINT "NUMBER","PART","NUMBER OF PART NEEDED"
220 PRINT "1","BODY","1"
230 PRINT "2","NECK","1"
240 PRINT "3","HEAD","1"
250 PRINT "4","FEELERS","2"
260 PRINT "5","TAIL","1"
270 PRINT "6","LEGS","6"
280 PRINT
290 PRINT
300 IF Y>0 THEN 2480
310 Z=INT(6*RND(1)+1)
320 C=1
330 PRINT "YOU ROLLED A ";Z
340 ON Z GOTO 350,430,540,650,760,870
350 PRINT "1=BODY"
360 IF B=1 THEN 410
370 PRINT "YOU NOW HAVE A BODY."
380 B=1
390 C=0
400 GOTO 970
410 PRINT "YOU DO NOT NEED A BODY."
420 GOTO 970
430 PRINT "2=NECK"
440 IF N=1 THEN 500
450 IF B=0 THEN 520
460 PRINT "YOU NOW HAVE A NECK."
470 N=1
480 C=0
490 GOTO 970
500 PRINT "YOU DO NOT NEED A NECK."
510 GOTO 970
520 PRINT "YOU DO NOT HAVE A BODY."
530 GOTO 970
540 PRINT "3=HEAD"
550 IF N=0 THEN 610
560 IF H=1 THEN 630
570 PRINT "YOU NEEDED A HEAD."
580 H=1
590 C=0
600 GOTO 970
610 PRINT "YOU DO NOT HAVE A NECK."
620 GOTO 970
630 PRINT "YOU HAVE A HEAD."
640 GOTO 970
650 PRINT "4=FEELERS"
660 IF H=0 THEN 740
670 IF A=2 THEN 720
680 PRINT "I NOW GIVE YOU A FEELER"
690 A=A+1
700 C=0
710 GOTO 970
720 PRINT "YOU HAVE TWO FEELERS ALREADY."
730 GOTO 970
740 PRINT "YOU DO NOT HAVE A HEAD."
750 GOTO 970
760 PRINT "5=TAIL"
770 IF B=0 THEN 830
780 IF T=1 THEN 850
790 PRINT "I NOW GIVE YOU A TAIL."
800 T=T+1
810 C=0
820 GOTO 970
830 PRINT "YOU DO NOT HAVE A BODY."
840 GOTO 970
850 PRINT "YOU ALREADY HAVE A TAIL."
860 GOTO 970
870 PRINT "6=LEG"
880 IF L=6 THEN 940
890 IF B=0 THEN 960
900 L=L+1
910 C=0
920 PRINT "YOU NOW HAVE ";L;" LEGS."
930 GOTO 970
940 PRINT "YOU HAVE 6 FEET ALREADY."
950 GOTO 970
960 PRINT "YOU DO NOT HAVE A BODY."
970 X=INT(6*RND(1)+1)
980 PRINT "I ROLLED A";X
990 ON X GOTO 1000,1080,1190,1300,1410,1520
1000 PRINT "1=BODY"
1010 IF P=1 THEN 1060
1020 PRINT "I NOW HAVE A BODY."
1030 C=0
1040 P=1
1050 GOTO 1630
1060 PRINT "I DO NOT NEED A BODY."
1070 GOTO 1630
1080 PRINT "2=NECK"
1090 IF Q=1 THEN 1150
1100 IF P=0 THEN 1170
1110 PRINT "I NOW HAVE A NECK."
1120 Q=1
1130 C=0
1140 GOTO 1630
1150 PRINT "I DO NOT NEED A NECK."
1160 GOTO 1630
1170 PRINT "I DO NOT HAVE A BODY."
1180 GOTO 1630
1190 PRINT "3=HEAD"
1200 IF Q=0 THEN 1260
1210 IF R=1 THEN 1280
1220 PRINT "I NEEDED A HEAD."
1230 R=1
1240 C=0
1250 GOTO 1630
1260 PRINT "I DO NOT HAVE A NECK."
1270 GOTO 1630
1280 PRINT "I DO NOT NEED A HEAD."
1290 GOTO 1630
1300 PRINT "4=FEELERS"
1310 IF R=0 THEN 1390
1320 IF S=2 THEN 1370
1330 PRINT "I GET A FEELER."
1340 S=S+1
1350 C=0
1360 GOTO 1630
1370 PRINT "I HAVE 2 FEELERS ALREADY."
1380 GOTO 1630
1390 PRINT "I DO NOT HAVE A HEAD."
1400 GOTO 1630
1410 PRINT "5=TAIL"
1420 IF P=0 THEN 1480
1430 IF U=1 THEN 1500
1440 PRINT "I NOW HAVE A TAIL."
1450 U=1
1460 C=0
1470 GOTO 1630
1480 PRINT "I DO NOT HAVE A BODY."
1490 GOTO 1630
1500 PRINT "I DO NOT NEED A TAIL."
1510 GOTO 1630
1520 PRINT "6=LEGS"
1530 IF V=6 THEN 1590
1540 IF P=0 THEN 1610
1550 V=V+1
1560 C=0
1570 PRINT "I NOW HAVE";V;"LEGS."
1580 GOTO 1630
1590 PRINT,"I HAVE 6 FEET."
1600 GOTO 1630
1610 PRINT "I DO NOT HAVE A BODY."
1620 GOTO 1630
1630 IF A=2 AND T=1 AND L=6 THEN 1650
1640 GOTO 1670
1650 PRINT "YOUR BUG IS FINISHED."
1660 Y=Y+1
1670 IF S=2 AND P=1 AND V=6 THEN 1690
1680 GOTO 1710
1690 PRINT "MY BUG IS FINISHED."
1700 Y=Y+2
1710 IF C=1 THEN 300
1720 PRINT "DO YOU WANT THE PICTURES";
1730 INPUT Z$
1740 IF Z$="NO" THEN 300
1750 PRINT "*****YOUR BUG*****"
1760 PRINT
1770 PRINT
1780 IF A=0 THEN 1860
1790 FOR Z=1 TO 4
1800 FOR X=1 TO A
1810 PRINT TAB(10);
1820 PRINT "A ";
1830 NEXT X
1840 PRINT
1850 NEXT Z
1860 IF H=0 THEN 1880
1870 GOSUB 2470
1880 IF N=0 THEN 1920
1890 FOR Z=1 TO 2
1900 PRINT "          N N"
1910 NEXT Z
1920 IF B=0 THEN 2000
1930 PRINT "     BBBBBBBBBBBB"
1940 FOR Z=1 TO 2
1950 PRINT "     B         B"
1960 NEXT Z
1970 IF T<>1 THEN 1990
1980 PRINT "TTTTTB         B"
1990 PRINT "     BBBBBBBBBBBB"
2000 IF L=0 THEN 2080
2010 FOR Z=1 TO 2
2020 PRINT TAB(5);
2030 FOR X=1 TO L
2040 PRINT " L";
2050 NEXT X
2060 PRINT
2070 NEXT Z
2080 FOR Z=1 TO 4
2090 PRINT
2100 NEXT Z
2110 PRINT "******MY BUG******"
2120 PRINT
2130 PRINT
2140 PRINT
2150 IF S=0 THEN 2230
2160 FOR Z=1 TO 4
2170 PRINT TAB(10);
2180 FOR X=1 TO S
2190 PRINT "F ";
2200 NEXT X
2210 PRINT
2220 NEXT Z
2230 IF R<>1 THEN 2250
2240 GOSUB 2470
2250 IF Q=0 THEN 2280
2260 PRINT "          N N"
2270 PRINT "          N N"
2280 IF P=0 THEN 2360
2290 PRINT "     BBBBBBBBBBBB"
2300 FOR Z=1 TO 2
2310 PRINT "     B         B"
2320 NEXT Z
2330 IF U<>1 THEN 2350
2340 PRINT "TTTTTB         B"
2350 PRINT "     BBBBBBBBBBBB"
2360 IF V=0 THEN 2450
2370 FOR Z=1 TO 2
2380 PRINT TAB(5);
2390 FOR X=1 TO V
2400 PRINT " L";
2410 NEXT X
2420 PRINT
2430 NEXT Z
2450 IF Y<>0 THEN 2540
2460 GOTO 300
2470 PRINT "        HHHHHHH"
2480 PRINT "        H     H"
2490 PRINT "        H O O H"
2500 PRINT "        H     H"
2510 PRINT "        H V H"
2520 PRINT "        HHHHHHH"
2530 RETURN
2540 PRINT "I HOPE YOU ENJOYED THE GAME,
2550 END                 PLAY IT AGAIN SOON!!"
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