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AUCKLAND COLOUR GENIE USERS GROUP

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P. O. Box 27-387,
AUCKLAND, 4.

ISSUE NO: 9

OCTOBER, 1984

Hi,
Last month (17th September) a crowd of 68 came along to the meeting. We now have 118 'financial' members, with many having two or more family members which come along to our meetings. Hopefully, everyone knows now, that our meetings are on every fourth Monday, not the fourth Monday of the month. However, please mark your calendars with the meeting dates from now to Christmas:-

15 October 1984 - tonight
12 November 1984
10 December 1984

By the way, Rakon have a couple of EACA recorders left at \$119.50 each.

Re tape copying - we have had a few problems sorting this out, but hopefully we now have it licked!! It hasn't actually been too bad, there haven't been many tapes returned. Probably about 15 out of hundreds. One chap who said at the meeting how a tape he had got from us wouldnt load, turned out to be talking about a Rakon tape.

All tapes that are returned to me for recopying have to be posted on to Ken, who recopies them, then posts them back to me. I then have to post them back to you. So, from this, you can see where the delay comes in for your recopied tapes to be sent back to you, can't you. Probably about a week in the Post Office's hands, let alone the time spent checking and recopying your bad tape. So, don't panic if you don't get your tape back within the first few days of posting it off to me.

We would also like to point out, that in line with other software producers in New Zealand, we do not give a warranty on software. If you cannot load your tape, we will re-copy it for you, but under no circumstances are we prepared to give you your money back. We realise that in a lot of cases you are buying 'sight unseen', but where else can you get such cheap software??? And we do give a bit of leeway where country members are concerned.

We have our first problem with a member now, regarding the above paragraph. Mr Stirling Barr is taking us to the Small Claims Court, because we will not return his money to him after he purchased a Word Processing tape last month. We have pointed out that we are quite willing to redo his tape if it doesn't load, but the problem seems to be that Allan Clarke has left some errors in his program. It is our understanding that Allan Clarke has made his programs available with the agreement that there could be errors which he will fix and update copies sold when he returns to New Zealand next year. It is my considered opinion, as a secretary/typist of some 100 years (no, perhaps only 19 years) that this word processing tape is quite good. I have now used three word processing tapes on the Colour Genie, and of the three, I feel that Allan Clarke's tape stands out, apart from the annoying habit which is built in to the program deliberately, of wiping out all your blank lines (unless you have remembered to put in the special symbol) when printing. 17 people have now purchased this program, do you all really find it 'full of errors'?

However, Mr Barr, it really wasn't necessary to ring and abuse my husband, was it? He knows nothing at all about the Colour Genie group and what goes on therein.

Regarding the software, right at the back of this magazine you will find two blank order forms. If you could use these forms when ordering items from us in future, this will make it easier than writing out letters. If these could be filled out before you come to the meeting, it would also help my hand (the one that gets writers cramp!)

Can someone please help Ray Dyer (5 Browne Street, Kawerau) with his common Philips TV rolling problem. Could someone please write to him with a fix for this. I know Olwen gave the cure at one of the early meetings. Can anyone remember what it was?

- Nola Huggins

E R R A T A

Easycode

There is an error in line 16200 - delete the first of two quote marks (keybounce again!!) Keith McGill

George Muzyka would like to make the following corrections to the Programmable Graphics Generator, published in a recent issue.

```
570 IF PEEK(16444)=8 THEN C=C-40:IF C < 125 THEN C=C+40 ELSE PRINT@C," "
580 IF PEEK(16444)=32 THEN C=C-1:IF ((C/40)-(INT(C/40)))*40 < 5.5 THEN
    C=C+1 ELSE PRINT@C," "
590 IF PEEK(16444)=64 THEN C=C+1:IF ((C/40)-(INT (C/40)))*40 >21.5 THEN
    C=C-1 ELSE PRINT@C," "
600 IF PEEK(16444)=16 THEN C=C+40:IF C >7 THEN C=C-40 ELSE PRINT@C," "
1610 K$=INKEY$
```

200 should be PRINT@880 not 920

LIST OF FINANCIAL COLOUR GENIE GROUP MEMBERS AS AT 24/9/84

| | | | |
|-----------------------|-----------------------------------|----------|---------|
| ALVAREZ, Fred | 49 Astley Ave, New Lynn | 873 120 | |
| ANDREWS, Rhys | 18 Bramley Drive, Pakuranga | | Student |
| AUSTIN, Des | Karaka North Rd, R.D.1, Papakura | | Country |
| AVIS, Stephen | 12 Ruru Crescent, Putaruru | 7750 | Country |
| BARKER, Anne & family | 1 Carbery Place, Manurewa | 267 4833 | |
| BARR, Stirling | 32 Kapuka Rd, Mangere Bridge | 668 551 | |
| BERMAN, Robert | 16 Asbury Cres, Campbells Bay | 478 4022 | Student |
| BISHOP, Chris | 6 Jenanne Place, Glenfield | 444 5301 | |
| BOYLE, Danny | 224 Park St, Winton, Invercargill | | Country |
| BROOKE, Richard | PO Box 700, Hastings | | Country |
| BURROWES, David | 86 Wood St, Palmerston North | | Country |
| BURTON, Ron | P O Box 208, Te Aroha | 625 Man. | Country |
| BYRNES, Ces | 31 Rosehill Drive, Papakura | 298 4107 | Country |
| CAIRNS, Keith | Box 36, Ngongotaha, | | Country |
| CAMERON, Sean | 3A Quovadus Place, Red Beach | | Student |
| CARIAN, Craig | 42A Comins Cres, Mission Bay | 583 061 | |
| | Postal Box 4326, Auckland | | |
| COLLINS, Dick | Box 301, Paraparaumu | 86431PRM | Country |
| COLSON, Keith | 21 Stapleford Cres, Browns Bay | | Student |
| COWEN, J. | Milson Line 5 R.D. Feilding | | Country |
| CRANE, Darrell | 64 Ranald Ave, Glenbrook Beach | | |
| CRUMP, S.J. | No. 6 R.D., Gore | | Country |

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| | | | |
|---------------------------|--|-----------|---------|
| DICKENS, Brent | 154 Normandale Rd, Normandale | 666 133 | Country |
| DIX, Keith | 21 Adel Place, Weymouth | 267 0434 | |
| DONALDSON, David & family | 80 Woolfield Rd, Papatoetoe | 278 7598 | |
| DRAPER, Mr C.F. | C/- Lakeland TV & Stereo, Box 892, Taupo | 88 888 | Country |
| DUNNINGHAM, Neville | 5 Kingswood Rd, Papatoetoe | 278 3105 | |
| DYER, Ray | 5 Browne Street, Kawerau | 6199 Kaw. | Country |
| EDWARDS, Don | 10 Fairview Ave, Feilding | | Country |
| ELLEY, family | 40 Mary Dreaver St, Block Bay | 675 024 | |
| ELISAK, Alex & Kevyn | 14 Awakino Place, Manurewa | 266 7423 | |
| FISHER, Peter | 64 Old Wairoa Rd, Papakura | 298 4654 | |
| GEBBIE, George | 141 Flanshaw Rd, Te Atatu Sth | 83 46028 | |
| GOLDIE, Willie & Andrew | 24 Douglas Ave, Mt Albert | 867 533 | |
| GORDON, Terry | 99 Reeves Rd, Pakuranga | 566 564 | |
| GREEN, Gordon & family | 62 Rajkot Tce, Khandallah, Wgn4. | | Country |
| GREEN, Mike | 49 Astley Ave, New Lynn | 873 120 | Student |
| GROVE, Chris & family | 4 Salem Place, Torbay | | |
| GRUSNING, Neill | 48 Beatty Rd, Pukekohe | 86 712 | Country |
| GURNEY, P.A. | 10 Norfolk Rise, Waiuku | 59 682 | Country |
| HAMILL, family | 26 Ashlyne Ave, Papatoetoe | 278 9585 | |
| HARNESS, Justin | 18 Wynyard Rd, Mt Eden | 602 189 | Student |
| HARRIS, Bert & family | 15 Seakens Way, Glen Eden | 818 4660 | |
| HEAP, family | 23 Leatham Crescent, Papakura | 298 5550 | |
| HILL, Gerrard & family | 86 Wallace Rd, Papatoetoe | 278 3446 | |
| HISLOP, Adam | 3 Martin Gr, Normandale, Lower Hut | | Country |
| HOLES, Freda & family | 10 Rowan Terrace, Te Atatu Sth | 83 45244 | |
| HOLT, Bernie | P.O. Box 23-303, Papatoetoe | | |
| HOYES, Peter | 17 Luton Avenue, Pakuranga | | |
| * HUGGINS, Nola | 612 Mt Albert Rd, Royal Oak | 655 718 | |
| * HYNDS, Ken | 13 Ngahue Cres, Whenuapai | 416 7404 | |
| IRVINE, Robyn | 430 Massey Rd, Mangere East | 275 7007 | |
| JONES, Murray | 6 Shearman Grove, Tauranga | | Country |
| JOYCE, Noel D. | 196 Conon Street, Invercargill | | Country |
| KANE, Mrs Deidre | 31 Momona Rd, Greenlane | 542 254 | |
| KUMAR, Susil | Fl.10, 7 Tralee Place, Hamilton | 68 262 | Country |
| KAY, Ross | 2/9 Longreach Drive, Glen Eden | 818 4818 | |
| LAMBOURN, A P & family | 32 Mead St, Avondale | 866 918. | |
| LANGDON, Mark | 6 Trias Road, Glenfield | 444 4247 | |
| LEWIS, Stuart | 39 Hillcrest Ave, Rotorua | | Country |
| LIDDEL, family | 91 Taikata Rd, Te Atatu Nth | 834 7129 | |
| LOCKERBIE, Claire & Roger | 63 Grampian Road, St Heliers | 580 270 | |
| LYALL, R.G. | 78 Dimock St, Titahi Bay, Wgn | | Country |
| MacALPINE, Mr E. | 45 Mutu St, Te Awamutu | | Country |
| McCREEDY, Bert | 16 Walpole St, Ellerslie | 597 308 | |
| MacDONALD, Iain | 3 Amy Street, Ellerslie | 596 412 | |
| McFARLANE, Tom | 2/14 Calkin Cres, Papatoetoe | 278 2366 | |
| McGILL, Keith | 15 Manapouri Place, Pakuranga | 565 643 | |
| MAGGS, Philip | 21 Cheltenham Rd, Devonport | 450 029 | |
| MANAWARU SCHOOL | R.D.1, Te Aroha, Attn: Brian Fellows, Principal | | Country |
| MAWBY, David J. | 40 Gordon Tce, Gore | 5000 | Country |
| MELLARS, Les | 564 Beach Road, Rothesay Bay | | |
| METCALFE, E.K. | Box 13031, University of Waikato P.O., Hamilton | | Country |
| MILLAR, Robert | 17 Onewa Rd, Northcote | 486 504 | Student |
| MILLER, Paul | C/- WO's & SNCO's Mess, RNZAF Base, Wigram, Christchurch. | | Country |

| | | | |
|----------------------------|--|--------------------|---------|
| MILLS, Andrew | 59 Blackbeech St, Akatarawa, Lower Hutt | | Country |
| MITCHELL, Geoff | Box 95, Mangawhai, Northland | 68 175 | Country |
| MULLEN, Peter | 54 Park Road, Glenfield | 444 9155 | |
| MUZYKA, George | 33 Vermont St, Ponsonby | 789 176 | Student |
| NICHOL, Bryce | C/- FEPB, Private Bag, Pukekohe | 299 6203 | Student |
| NOGAJ, Jan | Mauku Street, Manaku, Rotorua ? | | Country |
| NOWILL, Malcolm | 16 Fd Regt RNZA, Papakura Camp | | |
| O'CALLAHAN, Robert | 8A Komaru St, Remuera | | |
| PAKES, Robert | 3 Russell Crescent, Rotorua | | Country |
| PETERS, D.R. | 6 Tane Lane, Whakatane | | Country |
| PHILLIPSEN, Mr H.E. | Box 409, Havelock Nth, Hawkes Bay | | Country |
| PUKU, Joe | 33 Dalloch Street, Manurewa | | |
| QUAIN, family | 12 Wilkinson Way, Browns Bay | | |
| RAKON COMPUTERS LTD | Private Bag, Newmarket | 600 421 | |
| RICHMOND, Bob | 181 Browns Bay Rd, Browns Bay | 478 4745 | |
| RIGNEY, Gene | Kaharoa Rd, R.D.2, Ngongotaha | | Country |
| ROBINSON, Ian | 4 Kingsley Street, Gisborne | | Country |
| * ROOTS, Ernie | 512 Glenfield Rd, Glenfield | 444 9669 | |
| * RUSSELL, Andy | 2 Takitimu St, Whenuapai | 416 6249 | |
| RUSSELL, Bill | 25 Sturdee Road, Manurewa | | |
| SALT, T.K. | 92 Omapere St, Whitby, Wgtn. | | Country |
| SAUNDERS, A.M. | 96 Oriel Ave, Tawa, Wellington | | Country |
| SAVILLE, family | 7A Southlynn Rd, Titirangi | 817 6491 | |
| SCOTHERN, D.J. | 64 Princess Road, Tauranga | | Country |
| SEATON, Michael | 56 Compton St, Northcote | 481 042 | Student |
| SEYB, Bruce & family | 127 Cannongate St, Birkdale | 439 746 | |
| SIMPSON, Ron | 25 Renata Cres, Te Atatu Nth | 834 6987 | |
| SMITH, Barry | 23 Eliot St, New Plymouth | | Country |
| SPRATT, Dave | 11 Ball Place, Mt Roskill | 675 676 | |
| STAMP, Linton | 11 Mary Beth Place, Papakura | | |
| STARKE, Mrs L.M. | Urquharts Rd, Karaka, R.D.1., Papakura | | Country |
| STEPHENS, Frances & family | 35 Raurenga Ave, Royal Oak | 654 120 | |
| STRANAGHAN, family | 29 Haseler Cres, Howick | 535 7450 | |
| SWASBROOK, family | 43 Pickwick Parade, Howick | | |
| TODD, A.J. | 46A Hutton Street, Otahuhu | 276 7886 | |
| TRUE, Murray & Anne | 4/503 Oliphant Rd, Hastings | | Country |
| TUAVERA, Jeffery | 732 Sandringham Rd, Sand | 693 986 | |
| VERMUELEN, Mr D.P. | Strathmore Rd, Reporoa | | Country |
| WALKER, Barry & Irene | 20 Ellesmere Cres, Palm, North | | Country |
| WALKER, David | Kiwitea, No 7 R.D, Feilding | | Country |
| WAWMAN, Don | 5/53 Bellevue Rd, Mt Eden | 797 440 X685(work) | |
| WESSELING, Ralph | 112 Pt View Drive, Papatoetoe | 535 6134 | |
| * WILLIAMS, Olwen | 3/26A West End Rd, Herne Bay | 761 954 | |
| WILTON-JONES, Jason | 11 Mountain Rd, Henderson | 837 0564 | Student |

Total - 118 members

* -Committee Members

PUNTER \$12.00
A horse-race-simulation/game. This is really good, the horses with their jockeys look very realistic racing across the screen. Another thinking-type game, definitely not arcade. Put bets on the horses you think will win. Can ask what the horse's form is. Up to nine people can play at the same time.

GENIE TREK \$12.00
Another 'Space Trek' game, like the one available now. I haven't tried it out yet, but it has received a very good write-up in England.

ROCKSOFT GAMES \$12.00
Four games on the one tape, all called up from a menu. Good value.

ROCKSOFT UTILITIES \$12.00
Four utilities all on the one tape, also called up from a menu. A screen scroller, title-producer, a program to load or save tapes faster or slower, and a Genie-plot program, with which you can draw pictures and save them to tape.

BACH ORGAN \$12.00
This is another great program - turns the Genie into an organ.

FULL SCREEN EDITOR \$20.00
Move your cursor all over the screen at will. Price includes 4 page manual. Available either from us, or from Phil Lovegrove, at Rakon Computers Ltd. A terrific utility. We would prefer that you buy from us of course, then we make a little bit on each tape sold.

INVOICING \$15.00
A complete Sales Invoice, well set out. When you have finished invoicing, it gives you a total of what has been invoiced. Basic program will need VAT part deleting.

NOMINAL LEDGER \$15.00
A complete ledger program for the Colour Genie.

E. A. Jackson's software is now available - these are:-

P.O.B. GRAPHICS EDITOR \$10.00
This is a program that allows you to create your own 'Picture Object Blocks'. There is a two page manual to go with it, which includes full instructions, and another small program on how to use the POBs once you have created them.

SHAPE DESIGNER \$10.00
This is an extremely good program, allowing you to design shapes on the screen, using a Shape cursor. Two pages on how to use it, plus another small program on how to use the shapes once created.

GENIE CALC \$15.00
This program is a spreadsheet that shows three columns on the screen at one time. Has a three page manual, which is very comprehensive.

ELECTRONIC DESK \$15.00
This is the program we have all been waiting for. It includes a calculator, name/telephone index (with sorting and searching capabilities), calendar, jotter/diary pad, and a budgeting program. Also includes a comprehensive two-page manual on using this program.

With any of the utility programs, a free copy of Etch and Sketch and/or Toolkit will also be included. Etch and Sketch has one page instructions.

LEARN TO COUNT WITH FREDDY FROG \$10.00
A game for young children, which teaches counting and basic arithmetic.

PONTOON/SNAKE SNATCH \$10.00
This program includes two games on the one tape. Snake Snatch is the same as the 'Snake' program that Rakon have.

DEMON DERBY AND GAMES BOARD \$10.00
More games.

HI-LO and TUNES & COLOURS \$10.00
Hi-Lo is a very good version of 'Play your cards right' (TV game). Tunes and Colours is a 'Simon Says' game.

SCREEN DUMP TO PRINTER

Chris Bishop

Printers will not accept "PRINT @" statements because they may not be in order in the program
e.g.

```
30 PRINT@ 345,"HELLO"  
40 PRINT@ 160,"GOODBYE"
```

The following short program is a screen dump and can be added to your own programs. It scans the screen memory locations in order from top left to bottem right and prints what it sees

```
10000 F=17408  
10010 FOR J=0 TO 24      (23 for old roms)  
10020 FOR S=F TO P+39  
10030 G=FEEK(S)  
10040 LPRINT CHR$(G);:LPRINT" ";  
10050 NEXT S  
10060 LPRINT CHR$(128)  
10070 F=F+40  
10080 NEXT J
```

The next line is a GOTO or RETURN to suit your program.

You will see that we have made the newsletter a little smaller. With sending out back issues to everyone, I have had to hire a photocopy machine for a month. I really couldn't load poor Chris down with any more - he has already got a pile to do. So, with this, it is now costing \$1.60 to photocopy each magazine - quite a cost. Therefore, we are going to have to cut down the size of the magazine, so that we don't have to put the cost of the subscription up.

Please note that we are putting postage costs to country members up to \$1.50 from now on. The bubbly bags cost 60c each for the large one we use, which only leaves 40c for cost of postage. As postage usually costs more than 40c we are losing money. Thank you to those country members (like Neill Grusning and Ces Byrnes, and Christchurch group to name a few) that have been adding more money to their postage costs.

Also, please note that Technical Manuals are now freely available from the Group. They cost \$12.00 each plus \$1.50 postage and package.

```
10 REM OTHELLO/REVERSI
20 REM PETER B MAGGS
30 REM BYTE NOVEMBER 1979
40 REM COVERTED TO COLOUR GENIE
105 DIMA(100)
110 DIMB(100)
112 DIMC(100)
113 DIMD(8)
114 DIME(100)
115 RANDOM
171 D(1)=1
172 D(2)=11
173 D(3)=10
174 D(4)=9
175 D(5)=-1
176 D(6)=-11
177 D(7)=-10
178 D(8)=-9
185 GOSUB9000
200 GOSUB8000
205 IFQ.LT.5 THEN 295
215 GOSUB1300
220 IFT=1 THEN 295
225 T3=T3+1
226 IF T3.LT.2 THEN 254
228 PRINT:PRINT"THE GAME IS OVER"
229 N=0
230 J=0
231 FORZ=12 TO 89
232 IFB(Z)=-1 THEN 239
234 IFB(Z).LT..GT.1 THEN244
235 J=J+1
237 GOTO 244
239 N=N+1
244 NEXTZ
245 PRINT"BLACK HAS ";N;"WHITE HAS ";J;"PIECES"
248 PRINT"DO YOU WISH TO PLAY AGAIN
      (0=NO, 1=YES";
250 INPUT T
251 RESTORE
252 IF T=1 THEN 185
253 GOTO9998
254 PRINT
255 IF P=1 THEN 260
256 PRINT"BLACK HAS NO PLAY, LOSES TURN"
258 GOTO950
260 PRINT"WHITE HAS NO PLAY, LOSES TURN"
270 GOTO 950
295 GOSUB 1100
```



```
380 IF M.LT..GT.1 THEN 500
390 IF Q.GT.4 THEN 430
402 M=45
403 IFB(M)=2 THEN 540
404 M=M+1
405 GOTO403
430 GOSUB3000
500 IFM.LT.1 THEN 800
510 IFM.GT.100 THEN 800
520 IFQ.GT.4 THEN 600
530 IFB(M).LT..GT.2 THEN 800
540 B(M)=P
550 GOTO830
600 GOSUB1400
640 IF T.LT..GT.0 THEN 950
800 PRINT 'ILLEGAL PLAY':FORX=0TO200:NEXT
820 GOTO 200
830 Q=Q+1
950 P=-P
955 IF E(M) .LT..GT.64 THEN 200
960 GOSUB 5000
970 GOTO200
1100 PRINT
1101 PRINT'IF YOU WANT THE COMPUTER TO PLAY,
ENTER 0,0'
1115 IF P=1 THEN 1140
1120 PRINT'BLACK';
1130 GOTO 1145
1140 PRINT 'WHITE';
1145 PRINT'S TURN, ENTER X,Y';
1150 INPUT X,Y
1160 M=X+1+10*Y
1170 RETURN
1300 T=1
1301 PRINT 'CHECKING';
1302 M=1
1310 IFU.LT.4 THEN 1318
1316 U=0
1317 PRINT '.';
1318 U=U+1
1320 IFB(M).LT..GT.0 THEN 1390
1330 N=1
1340 J=D(N)
1350 IFB(M+J).LT..GT.-P THEN 1385
1370 K=M+J+J
1380 IFB(K)=3 THEN 1385
1381 IFB(K)=0 THEN 1385
1382 IFB(K)=P THEN 1396
1383 K=K+J
1384 GOTO 1380
1385 N=N+1
1386 IFN.LT.9 THEN 1340
1390 M=M+1
1391 IFM.LT.90 THEN 1310
1392 T=0
1394 RETURN
1396 T3=0
1398 RETURN
1400 T=0
```

OTHELLO P3

```

1410 IFB(M)=0 THEN 1430
1420 RETURN
1430 N=1
1440 J=D(N)
1444 IFB(M+J).LT..GT.-P THEN 1700
1470 K=M+J+J
1480 IFB(K)=3 THEN 1700
1490 IFB(K)=0 THEN 1700
1500 IFB(K)=P THEN 1530
1510 K=K+J
1515 GOTO 1480
1530 T=1
1531 L=M
1532 IF L=K THEN 1700
1533 B(L)=P
1534 L=L+J
1535 GOTO1532
1700 N=N+1
1705 IFN.LT.9 THEN1440
1710 RETURN
3000 PRINT▼▼THINKING▼▼;
3680 F=9999
3690 FORZ=12 TO 89
3700 C(Z)=B(Z)
3710 NEXTZ
3750 M=12
3752 IFU.LT.4 THEN 3759
3753 U=0
3755 PRINT▼▼.▼▼;
3759 U=U+1
3770 GOSUB1400
3780 IF T=0 THEN 3860
3790 GOSUB3900
3800 IFH.GT.F THEN 3840
3802 IFH.LT.F THEN 3810
3804 Z=RND(0)
3806 IFZ.GT..7 THEN3840
3810 F=H
3820 W=V
3840 FORZ=12 TO 89
3850 B(Z)=C(Z)
3855 NEXTZ
3860 M=M+1
3865 IFM.LT.90 THEN3752
3870 M=W
3875 PRINT
3880 RETURN

```

OTHELLO P4

```

3900 H=-99999
3920 FORZ=12 TO89
3925 A(Z)=B(Z)
3930 NEXTZ
3935 P=-P
3940 V=M
3950 M=12
3970 GOSUB1400
3980 IF T=0 THEN 4080
3990 GOSUB4130
4000 IF G.LT.F THEN 4030
4016 H=G
4020 GOTO4100
4030 IFG.LT.H THEN 4050
4040 H=G
4050 FORZ=12 TO 89
4060 B(Z)=A(Z)
4070 NEXTZ
4080 M=M+1
4090 IFM.LT.90 THEN 3970
4100 M=V
4105 P=-P
4110 RETURN
4130 G=0
4140 Z=12
4150 IFB(Z)=P THEN 4190
4160 IFB(Z)=0 THEN 4300
4170 G=G-E(Z)
4180 GOTO 4300
4190 G=G+E(Z)
4300 Z=Z+1
4400 IFZ.LT.90 THEN 4150
4500 RETURN
5000 IFM.LT..GT.12 THEN 5100
5010 E(13)=5
5020 E(22)=5
5030 E(23)=5
5100 IFM.LT..GT.19 THEN 5200
5110 E(18)=5
5120 E(28)=5
5130 E(29)=5
5200 IFM.LT..GT.82 THEN 5300
5210 E(72)=5
5220 E(73)=5
5230 E(83)=5
5300 IFM.LT..GT.89 THEN 5400
5310 E(79)=5
5320 E(78)=5
5330 E(88)=5
5400 RETURN

```

```

8000 CLS:PRINT  ^^          1  2  3  4  5  6  7  8^^
8100 PRINT,
8200 FOR Y=8 TO 1 STEP-1
8300 PRINTY;^^          ^^;
8400 FORX=1 TO 8
8500 IFB(X+1+Y*10)=1 THEN 8700
8550 IF B(X+1+Y*10)=-1 THEN 8900
8600 PRINT^^-  ^^;
8650 GOTO 8990
8700 PRINT  ^^W  ^^;
8800 GOTO 8990
8900 PRINT^^B  ^^;
8990 NEXTX
8995 PRINTY:PRINT
8996 NEXTY
8997 PRINT  ^^          1  2  3  4  5  6  7  8^^
8998 RETURN
9000 FORN=11 TO 90
9050 READE(N)
9060 NEXTN
9066 FORN=1 TO 100
9068 B(N)=0
9070 NEXTN
9074 FORN=1 TO 10
9076 B(N)=3
9078 B(90+N)=3
9080 B(10*N-9)=3
9082 B(10*N)=3
9085 NEXTN
9087 B(45)=2
9088 B(46)=2
9089 B(55)=2
9090 B(56)=2
9172 U=5
9186 Q=1
9062 P=-1
9191 RETURN
9220 DATA0, 64, -30, 10, 5, 5, 10, -30, 64, 0
9222 DATA0, -30, -40, 2, 2, 2, 2, -40, -30, 0
9224 DATA0, 10, 2, 5, 1, 1, 5, 2, 10, 0
9226 DATA0, 5, 2, 1, 1, 1, 1, 2, 5, 0
9228 DATA0, 5, 2, 1, 1, 1, 1, 2, 5, 0
9230 DATA0, 10, 2, 5, 1, 1, 5, 2, 10, 0
9234 DATA0, -30, -40, 2, 2, 2, 2, -40, -30, 0
9236 DATA0, 64, -30, 10, 5, 5, 10, -30, 64, 0
9998 STOP
9999 END

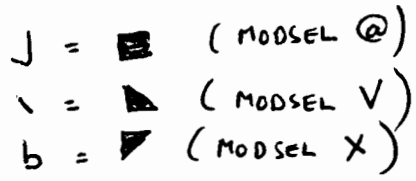
```

NOTE .LT. MEANS < , .GT. MEANS >

```

10 CLS:COLOUR4
20 PRINT@50,"JJJJ J J JJJJ"
30 PRINT@90,"J J J J"
40 PRINT@130,"JJJJ J J JJJJb"
50 PRINT@170,"J J J J"
60 PRINT@210,"J JJJJ J J"
70 PRINT@610,"INSTRUCTIONS -Y/N";:INPUT I#
75 PRINT
80 IF I#="Y" THEN GOSUB 620 ELSE 90
90 PRINT " PRESS ANY KEY TO CONTINUE"
91 PRINT
92 K#=INKEY#;IF K#="" THEN 92
100 CLS
110 DIMA(10),F(9)
120 M=-1;O=42;X=88;P=0
130 RANDOM
140 FOR C=1 TO 9
150 A(C)=0
160 IF INT(RND(0)+.5)=0 THEN A(C)=X
170 NEXT C
180 GOSUB 360
190 M=M+1
200 N=0
210 FOR C=1 TO 9
220 IF A(C)=X THEN N=N+1
230 NEXT C
240 IF N=1 AND A(5)=X THEN 420
250 IF M>0 THEN PRINT@360,"THAT WAS MOVE ";M
260 PRINT@440,"NUMBER OF X'S IS ";N
270 PRINT@520,"YOU ONLY NEED ONE - IN THE MIDDLE SQUARE"
280 PRINT@600,"Which one do you want to flip?"
290 IF INKEY#("<")="" THEN 290
300 A#=INKEY#
310 N=VAL(A#);IF N<1 OR N>9 THEN 300
320 P=N
330 GOSUB 450
340 GOTO 180
350 END
360 :PRINT@0," "

```



Adapted from Tim Hartnell's book
 Giant Book of Games
 (Fontana, 1983)

by KEITH MCGILL

```
370 IF P<>0 THEN PRINT@40,"You flipped ";P
380 PRINT@130,"1 2 3",CHR$(A(1));" ";CHR$(A(2));" ";CHR$(A(3))
390 PRINT@210,"4 5 6",CHR$(A(4));" ";CHR$(A(5));" ";CHR$(A(6))
400 PRINT@290,"7 8 9",CHR$(A(7));" ";CHR$(A(8));" ";CHR$(A(9))
410 RETURN
420 PRINT:PRINT
430 PRINT@880,"YOU SOLVED IT IN ";M;" MOVES"
440 END
450 REM:IF A(N)=X THEN RETURN
460 IF N=1 THEN F(1)=2:F(2)=4:F(3)=5:F(4)=10
470 IF N=2 THEN F(1)=1:F(2)=3:F(3)=10:F(4)=10
480 IF N=3 THEN F(1)=2:F(2)=5:F(3)=6:F(4)=10
490 IF N=4 THEN F(1)=1:F(2)=7:F(3)=10:F(4)=10
500 IF N=5 THEN F(1)=2:F(2)=4:F(3)=8:F(4)=6
510 IF N=6 THEN F(1)=3:F(2)=9:F(3)=10:F(4)=10
520 IF N=7 THEN F(1)=4:F(2)=5:F(3)=8:F(4)=10
530 IF N=8 THEN F(1)=7:F(2)=9:F(3)=10:F(4)=10
540 IF N=9 THEN F(1)=8:F(2)=5:F(3)=6:F(4)=10
550 FOR G=1 TO 4
560 F=0
570 IF A(F(G))=X THEN F=1:A(F(G))=0:GOTO 570
580 IF A(F(G))=0 THEN A(F(G))=X
590 NEXT G
600 IF A(N)=X THEN A(N)=0 ELSE IF A(N)=0 THEN A(N)=X
610 RETURN
620 REM:INSTRUCTIONS
625 PRINT
630 PRINT"THE AIM OF THE GAME IS TO FINISH WITH ONLY ONE 'X' - IN THE MIDDLE"
640 PRINT
650 PRINT"FLIPPING THEN CORNER PIECES WILL CHANGE THE CORNER FOUR"
660 PRINT
670 PRINT"FLIPPING THE MIDDLE PIECE OF A SIDE WILL CHANGE THAT SIDE"
680 PRINT
690 PRINT"FLIPPING THE CENTRE PIECE WILL CHANGE ALL FOUR MIDDLE PIECES"
700 PRINT
710 PRINT"THE PIECE YOU FLIP WILL ALWAYS CHANGE"
715 PRINT
720 RETURN
```
