

My thanks to Mr. Ibach who told me where to stick my stack pointer.

Program Written By BRETT BILBREY  
Based on a program in the ARCADIAN for the BLUE RAM

BASIC - User interrupt service for Foreground/Background processing

FOREGROUND-- BASIC operating

BACKGROUND - Machine vector movement and writing

10 clear	570 D=1280;gosub C	4D18 1F	ROUTINE 1E+1
20 A=19584;B=A;C=640	580 D=0;gosub C	4D19 38 4D	DEFW 4D38
30 D=-9741;gosub C	590 D=768;gosub C	4D1B 24 4D	DEFW 4D24
40 D=19518;gosub C	600 D=5;gosub C	4D1D 08	ROUTINE 08
50 D=18413;gosub C	610 D=0;gosub C		
60 D=-8130;gosub C	620 D=3;gosub C	4D20 00 98	DEFW 152
70 D=3539;gosub C	630 CALL(B);STOP	4D22 00 40	DEFW 64
80 D=-1063;gosub C	640 %(A)=D;A=A+2;return	4D24 00 00	DEFW 0
90 D=201;gosub C		4D26 02 08	DEFW 2050
100 A=19680	<u>MACHINE LISTING</u>	4D28 0A A0	DEFW -24566
110 D=19683;gosub C		4D2A 22 88	DEFW -30685
120 A=19683	4C80 F3 DI	4D2C AA AA	DEFW -21846
130 D=-20275;gosub C	4C81 D9 EXX	4D2E 2A A8	DEFW -22486
140 D=-3296;gosub C	4C82 3E 4C LD A,4C	4D30 08 20	DEFW 8200
150 D=29677;gosub C	4C84 ED 47 LD I,A	4D32 20 08	DEFW 2080
160 D=19568;gosub C	4C86 3E E0 LD A,E0	4D34 08 20	DEFW 8200
170 D=28721;gosub C	4C88 D3 0D OUT OD,A	4D36 00 00	DEFW 0
180 D=-2740;gosub C	4C8A D9 EXX	4D38 20	DEFB 32
190 D=-10811;gosub C	4C8B FB EI	4D39 80	DEFB 128
200 D=-8731;gosub C	4C8C C9 RET	4D3A 00	DEFB 0
210 D=-539;gosub C		4D3B 05	DEFB 5
220 D=-9243;gosub C	4CE0 E8 4C DEFW 4CE3	4D3C 00	DEFB 0
230 D=12828;gosub C		4D3D 00	DEFB 0
240 D=19770;gosub C	4CE3 CD B0 20 CALL 20B0	4D3E 00	DEFB 0
250 D=255;gosun C	4CE6 F3 DI	4D3F 03	DEFB 3
260 D=6151;gosub C	4CE7 ED 73 70 4C LD,4C70,SP	4D40 05	DEFB 5
270 D=16205;gosub C	4CEB 31 70 4C LD SP,4C70	4D41 00	DEFB 0
280 D=19768;gosub C	4CEE F5 PUSH AF	4D42 00	DEFB 0
290 D=19744;gosub C	4CEF C5 PUSH BC	4D43 00	DEFB 0
300 D=6151;gosub C	4CF0 D5 PUSH DE	4D44 03	DEFB 3
310 D=589;gosub C	4CF1 E5 PUSH HL		
320 D=-7683;gosub C	4CF2 DD E5 PUSH IX		
330 D=-7715;gosub C	4CF4 FD E5 PUSH IY		
340 D=-11807;gosub C	4CF6 DB 1C IN A,1C		
350 D=-3647;gosub C	4CF8 32 3A 4D LD(4D3A),A		
360 D=31725;gosub C	4CFB FF RST 38		
370 D=19568;gosub C	4CFC 00 ROUTINE 00		
380 D=-13829;gosub C	4CFD 07 ROUTINE 06+1		
390 A=19736	4CFE 18 4D DEFW 4D18		
400 D=14367;gosub C	4D00 3F ROUTINE 3E+1		
410 D=9293;gosub C	4D01 38 4D DEFW 4D38		
420 D=2125;gosub C	4D03 20 4D DEFW 4D20		
430 A=19744	4D05 07 ROUTINE 06+1		
440 D=-26624;gosub C	4D06 18 4D DEFW 4D18		
450 D=16384;gosub C	4D08 02 ROUTINE 02		
460 D=0;gosub C	4D09 FD E1 POP IY		
470 D=2050;gosub C	4DOB DD E1 POP IX		
480 D=-24566;gosub C	4D0D E1 POP HL		
490 D=-30685;gosub C	4DOE D1 POP DE		
500 D=-21846;gosub C	4DOF C1 POP BC		
510 D=-22486;gosub C	4D10 F1 POP AF		
520 D=8200;gosub C	4D11 ED 7B 70 4C LD SP,(4C70)		
530 D=2080;gosub C	4D15 FB EI		
540 D=8200;gosub C	4D16 C9 RET		
550 D=0;gosub C			
560 D=-32735;gosub C			

This program allows the user to develop his own interrupt service routines without the aid of memory expansion or special devices.

By just inputting the BASIC program, you will be able to use the BASIC while at the same time a critter will move about the screen at a speed given by knob #1.

The machine listing is only to inform the user of what is being poked in the BASIC program and is not inputted from BASIC.