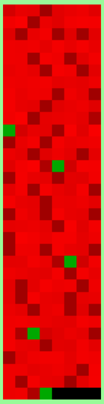
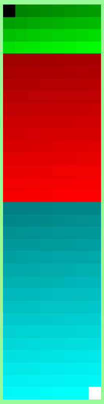


```
0000: 54 68 65 20  62 69 6E 61  72 79 20 6B  61 72 75 74  The bina ry karut
0010: 61 20 69 73  20 61 20 63  6F 6D 70 65  74 69 74 69  a is a c ompetiti
0020: 6F 6E 20 74  6F 20 62 72  69 6E 67 20  75 70 20 63  on to br ing up c
0030: 6F 6D 70 72  65 68 65 6E  73 69 6F 6E  20 6F 66 20  omprehen sion of 
0040: 74 68 65 20  62 69 6E 61  72 79 20 66  69 6C 65 2E  the bina ry file.
0050: 0A 54 68 65  20 77 61 79  20 69 73 20  73 69 6D 70  .The way  is simp
0060: 6C 65 20 61  6E 64 20 65  61 73 79 2E  0A 50 75 74  le and e asy..Put
0070: 20 74 68 65  20 63 61 72  64 73 20 74  68 61 74 20   the car ds that 
0080: 74 68 65 20  6B 69 6E 64  20 6F 66 20  74 68 65 20  the kind  of the 
0090: 66 69 6C 65  20 77 61 73  20 77 72 69  74 74 65 6E  file was  written
00A0: 20 6F 6E 20  74 68 65 20  64 65 73 6B  2E 0A 50 72   on the  desk..Pr
00B0: 6F 6A 65 63  74 20 74 68  65 20 64 75  6D 70 20 6F  oject th e dump o
00C0: 66 20 74 68  65 20 66 69  6C 65 20 69  6E 20 61 20  f the fi le in a 
00D0: 70 72 6F 6A  65 63 74 6F  72 2E 0A 54  61 6B 65 20  projecto r..Take 
00E0: 74 68 65 20  63 61 72 64  20 63 6F 72  72 65 73 70  the card  corresp
00F0: 6F 6E 64 69  6E 67 20 74  6F 20 74 68  65 20 64 75  onding t o the du
0100: 6D 70 2E 0A                                         mp..
0110:
0120:
0130:
0140:
0150:
0160:
0170:
0180:
0190:
01A0:
01B0:
01C0:
01D0:
01E0:
01F0:
```



```
0000: 00 01 02 03  04 05 06 07  08 09 0A 0B  0C 0D 0E 0F  ........ ........
0010: 10 11 12 13  14 15 16 17  18 19 1A 1B  1C 1D 1E 1F  ........ ........
0020: 20 21 22 23  24 25 26 27  28 29 2A 2B  2C 2D 2E 2F   !"#$%&' ()*+,-./
0030: 30 31 32 33  34 35 36 37  38 39 3A 3B  3C 3D 3E 3F  01234567 89:;<=>?
0040: 40 41 42 43  44 45 46 47  48 49 4A 4B  4C 4D 4E 4F  @ABCDEFG HIJKLMNO
0050: 50 51 52 53  54 55 56 57  58 59 5A 5B  5C 5D 5E 5F  PQRSTUVW XYZ[¥]^_
0060: 60 61 62 63  64 65 66 67  68 69 6A 6B  6C 6D 6E 6F  `abcdefg hijklmno
0070: 70 71 72 73  74 75 76 77  78 79 7A 7B  7C 7D 7E 7F  pqrstuvw xyz{|}~.
0080: 80 81 82 83  84 85 86 87  88 89 8A 8B  8C 8D 8E 8F  ........ ........
0090: 90 91 92 93  94 95 96 97  98 99 9A 9B  9C 9D 9E 9F  ........ ........
00A0: A0 A1 A2 A3  A4 A5 A6 A7  A8 A9 AA AB  AC AD AE AF  ........ ........
00B0: B0 B1 B2 B3  B4 B5 B6 B7  B8 B9 BA BB  BC BD BE BF  ........ ........
00C0: C0 C1 C2 C3  C4 C5 C6 C7  C8 C9 CA CB  CC CD CE CF  ........ ........
00D0: D0 D1 D2 D3  D4 D5 D6 D7  D8 D9 DA DB  DC DD DE DF  ........ ........
00E0: E0 E1 E2 E3  E4 E5 E6 E7  E8 E9 EA EB  EC ED EE EF  ........ ........
00F0: F0 F1 F2 F3  F4 F5 F6 F7  F8 F9 FA FB  FC FD FE FF  ........ ........
```

←ビットマップ画像　　　↑バイナリダンプ　　　↑対応する文字

■ バイナリかるたの遊びかた

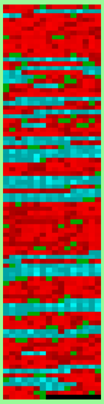
- 「JPEG」「ZIP」「ペイント画像」のような札を机に並べます
- それらのファイルの中身(バイナリダンプ)をプロジェクタで投影します
- スパーン!!と札を取りましょう

■ まずはビットマップ画像を見てみよう!

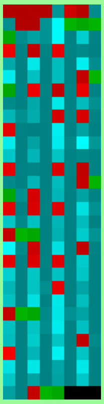
- ファイルの中身の全体を画像化したもので,ファイルごとに特徴があります
- 英数字や記号の部分は赤,改行は緑,漢字は水色に見えます
- 圧縮されているデータは,ノイズっぽくなります(いろんな色が乱雑に出ます)
- 様々な種類のデータがあると,地層のようになります

■ 対応する文字の部分を見てみよう!

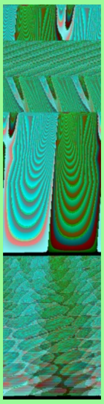
- 読める文字列が入っているかもしれない



```
0000: 3C 68 74 6D  6C 3E 0A 3C  68 65 61 64  3E 0A 3C 74  <html>.< head>.<t
0010: 69 74 6C 65  3E A5 D0 A5  A4 A5 CA A5  EA A4 AB A4  itle>... ........
0020: EB A4 BF 3C  2F 74 69 74  6C 65 3E 0A  3C 6D 65 74  ...</tit le>.<met
0030: 61 20 68 74  74 70 2D 65  71 75 69 76  3D 22 43 6F  a http-e quiv="Co
0040: 6E 74 65 6E  74 2D 54 79  70 65 22 20  63 6F 6E 74  ntent-Ty pe" cont
0050: 65 6E 74 3D  22 74 65 78  74 2F 68 74  6D 6C 3B 20  ent="tex t/html; 
0060: 63 68 61 72  73 65 74 3D  45 55 43 2D  4A 50 22 3E  charset= EUC-JP">
0070: 0A 3C 2F 68  65 61 64 3E  0A 0A 3C 62  6F 64 79 20  .</head> ..<body 
0080: 62 67 63 6F  6C 6F 72 3D  67 72 65 65  6E 20 74 65  bgcolor= green te
0090: 78 74 3D 77  68 69 74 65  20 6C 69 6E  6B 3D 79 65  xt=white  link=ye
00A0: 6C 6C 6F 77  20 76 6C 69  6E 6B 3D 62  6C 61 63 6B  llow vli nk=black
00B0: 3E 0A 0A 3C  63 65 6E 74  65 72 3E 0A  3C 68 31 3E  >..<cent er>.<h1>
00C0: A5 D0 A5 A4  A5 CA A5 EA  A4 AB A4 EB  A4 BF 3C 2F  ........ ......</
00D0: 68 31 3E 0A  3C 2F 63 65  6E 74 65 72  3E 0A 0A 3C  h1>.</ce nter>..<
00E0: 70 3E 0A A5  CF A5 C3 A5  B7 A5 E5 A5  BF A5 B0 A4  p>...... ........
00F0: CF A1 D6 23  62 69 6E 6B  61 72 75 74  61 A1 D7 A4  ...#bink aruta...
0100: C7 A4 B9 A1  A5 0A 0A 3C  70 3E 0A 3C  68 32 3E 0A  .......< p>.<h2>.
0110: CC DC BC A1  0A 3C 2F 68  32 3E 0A 0A  3C 75 6C 3E  .....</h 2>..<ul>
0120: 0A 3C 6C 69  3E B3 B5 CD  D7 0A 20 20  3C 75 6C 3E  .<li>... ..  <ul>
0130: 0A 20 20 3C  6C 69 3E 3C  61 20 68 72  65 66 3D 22  .  <li>< a href="
0140: 23 77 68 61  74 69 73 62  69 6E 6B 61  72 75 74 61  #whatisb inkaruta
0150: 22 3E A5 D0  A5 A4 A5 CA  A5 EA A4 AB  A4 EB A4 BF  ">...... ........
0160: A4 C8 A4 CF  B2 BF A4 AB  A1 A9 3C 2F  61 3E 0A 20  ........ ..</a>. 
0170: 20 3C 6C 69  3E 3C 61 20  68 72 65 66  3D 22 23 72   <li><a  href="#r
0180: 75 6C 65 22  3E A4 C9 A4  CE A4 E8 A4  A6 A4 CA B6  ule">... ........
0190: A5 B5 BB A4  AB A1 A9 3C  2F 61 3E 0A  20 20 3C 2F  .......< /a>.  </
01A0: 75 6C 3E 0A  3C 2F 75 6C  3E 0A 0A 3C  70 3E 0A 3C  ul>.</ul >..<p>.<
01B0: 68 32 3E B3  B5 CD D7 3C  2F 68 32 3E  0A 0A 3C 70  h2>....< /h2>..<p
01C0: 3E 0A 3C 61  20 6E 61 6D  65 3D 22 77  68 61 74 69  >.<a nam e="whati
01D0: 73 62 69 6E  6B 61 72 75  74 61 22 3E  3C 68 33 3E  sbinkaru ta"><h3>
01E0: A2 A3 20 A5  D0 A5 A4 A5  CA A5 EA A4  AB A4 EB A4  .. ..... ........
01F0: BF A4 C8 A4  CF B2 BF A4  AB A1 A9 3C  2F 68 33 3E  ........ ...</h3>
```

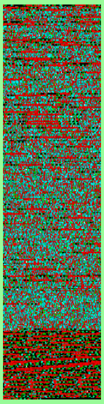


```
0000: 32 30 32 34  94 4E 38 8C  8E 33 31 93  FA 0D 0A 0D  2024.N8. .31.....
0010: 0A 8D A1 93  FA 82 CD 83  6F 83 43 83  69 83 8A 82  ........ o.C.i...
0020: A9 82 E9 82  BD 82 F0 8D  EC 82 C1 82  BD 81 44 0D  ........ ......D.
0030: 0A 83 6F 83  43 83 69 83  8A 82 A9 82  E9 82 BD 90  ..o.C.i. ........
0040: B6 90 AC 83  56 83 58 83  65 83 80 82  F0 82 A2 82  ....V.X. e.......
0050: EB 82 A2 82  EB 89 FC 97  C7 82 B5 82  C4 83 8A 83  ........ ........
0060: 6A 83 85 81  5B 83 41 83  8B 82 B5 82  BD 81 44 0D  j...[.A. ......D.
0070: 0A 90 56 82  B5 82 A2 83  66 81 5B 83  5E 82 E0 92  ..V..... f.[.^...
0080: C7 89 C1 82  B5 82 BD 81  44 0D 0A 82  B1 82 CC 93  ........ D.......
0090: FA 8B 4C 82  E0 81 43 83  66 81 5B 83  5E 82 CC 82  ..L...C. f.[.^...
00A0: D0 82 C6 82  C2 82 C6 82  B5 82 C4 8E  67 82 A4 82  ........ ....g...
00B0: C2 82 E0 82  E8 82 BE 81  44 0D 0A 8A  E6 92 A3 82  ........ D.......
00C0: C1 82 C4 8D  EC 82 C1 82  BD 82 CC 82  C5 81 43 8A  ........ ......C.
00D0: 79 82 B5 82  F1 82 C5 82  E0 82 E7 82  A6 82 E9 82  y....... ........
00E0: C6 82 A2 82  A2 82 C8 82  A0 81 44 0D  0A            ........ ..D..
00F0:
0100:
0110:
0120:
0130:
0140:
0150:
0160:
0170:
0180:
0190:
01A0:
01B0:
01C0:
01D0:
01E0:
01F0:
```

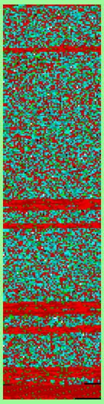


```
0000: 52 49 46 46  10 67 07 00  57 41 56 45  66 6D 74 20  RIFF.g.. WAVEfmt 
0010: 10 00 00 00  01 00 01 00  44 AC 00 00  88 58 01 00  ........ D....X..
0020: 02 00 10 00  64 61 74 61  EC 66 07 00  00 00 00 00  ....data .f......
0030: 0F 03 DB 07  00 0E F9 14  26 1C 8A 22  F2 26 46 29  ........ &..".&F)
0040: 5A 2A D6 2A  F2 2A B8 2A  43 2A 8F 29  B2 28 A9 27  Z*.*.*.* C*.).(.'
0050: 42 26 FF 24  92 23 25 22  97 20 D1 1E  41 1D 9D 1B  B&.$.#%" . ..A...
0060: F5 19 45 18  9C 16 F9 14  5E 13 C0 11  47 10 CB 0E  ..E..... ^...G...
0070: 81 0D D0 0B  F7 0A D1 09  0F 09 4D 08  DD 07 72 07  ........ ..M...r.
0080: 50 07 2A 07  4C 07 21 07  80 07 60 07  92 07 54 07  P.*.L.!. ..`...T.
0090: 49 07 D6 06  F1 06 70 06  5F 06 31 06  2B 06 07 06  I.....p. _.1.+...
00A0: 27 06 14 06  08 06 D6 05  94 05 1E 05  86 04 DA 03  '....... ........
00B0: CD 02 F6 01  A7 00 BA FF  82 FE A8 FD  5D FC 9C FB  ........ ....]...
00C0: 70 FA FE F9  EC F8 DD F8  FB F7 62 F8  C0 F7 D2 F8  p....... ..b.....
00D0: 83 F8 70 FA  49 FA 4C FD  72 FD C7 00  BF 00 53 04  ..p.I.L. r.....S.
00E0: 73 03 1E 07  BB 04 7B 08  85 04 7B 08  1B 03 C3 07  s.....{. ..{.....
00F0: E9 00 A1 06  46 FE 12 05  3C FB B8 03  64 F8 53 02  ....F... <...d.S.
0100: E9 F5 07 01  D6 F3 DE FF  95 F2 F9 FE  19 F2 5D FE  ........ ......].
0110: 50 F2 F2 FD  E7 F2 4D FD  C4 F3 AF FC  6A F4 9E FB  P.....M. ....j...
0120: E3 F4 84 FA  53 F5 7D F9  E7 F5 BE F8  6C F6 2C F8  ....S.}. ....l.,.
0130: B1 F6 96 F7  5E F6 7F F6  0D F5 AA F4  2F F3 42 F2  ....^... ..../.B.
0140: C9 F0 71 EF  E7 ED 5F EC  D0 EA 23 E9  98 E7 EF E5  ..q..._. ..#.....
0150: 58 E4 C8 E2  39 E1 B9 DF  F6 DD AA DC  9A DB 67 DA  X...9... ......g.
0160: 5F D9 73 D8  B4 D7 1D D7  B7 D6 88 D6  9B D6 F4 D6  _.s..... ........
0170: 9A D7 9A D8  F9 D9 C2 DB  FE DD 21 E1  84 E4 5E E8  ........ ..!...^.
0180: A2 EC 48 F1  28 F6 36 FB  83 00 16 06  E8 0B 5D 12  ..H.(.6. ......].
0190: 72 19 BA 20  58 26 CA 28  07 29 A3 28  EA 27 1B 27  r.. X&.( .).(.'.'
01A0: 21 26 FE 24  CF 23 76 22  0F 21 A1 1F  11 1E 8C 1C  !&.$.#v" .!......
01B0: E0 1A 34 19  AA 17 07 16  6F 14 DC 12  FF 10 C0 0F  ..4..... o.......
01C0: 48 0E 0B 0D  D1 0B C8 0A  B7 09 FD 08  46 08 CA 07  H....... ....F...
01D0: 71 07 45 07  24 07 3F 07  23 07 53 07  60 07 3D 07  q.E.$.?. #.S.`.=.
01E0: 54 07 18 07  01 07 99 06  A0 06 3F 06  57 06 F7 05  T....... ..?.W...
01F0: 38 06 E0 05  24 06 B2 05  DA 05 3F 05  20 05 F9 03  8...$... ..?. ...
```

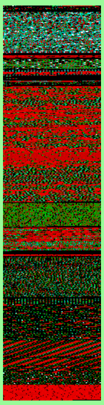
```
0000: 42 4D 8A 00  01 00 00 00  00 00 8A 00  00 00 7C 00  BM...... ......|.
0010: 00 00 80 00  00 00 80 00  00 00 01 00  20 00 03 00  ........ .... ...
0020: 00 00 00 00  01 00 12 0B  00 00 12 0B  00 00 00 00  ........ ........
0030: 00 00 00 00  00 00 00 00  FF 00 00 FF  00 00 FF 00  ........ ........
0040: 00 00 00 00  00 FF 01 00  00 00 00 00  00 00 00 00  ........ ........
0050: 00 00 54 B8  1E FC 00 00  00 00 00 00  00 00 69 66  ..T..... ......if
0060: 66 FC 00 00  00 00 00 00  00 00 C4 F5  28 FF 00 00  f....... ....(...
0070: 00 00 00 00  00 00 00 00  00 00 04 00  00 00 00 00  ........ ........
0080: 00 00 00 00  00 00 00 00  00 00 00 00  00 00 00 00  ........ ........
0090: 00 00 00 00  00 00 00 00  00 00 00 00  00 00 00 00  ........ ........
... Skipped same lines ...
0370: 00 00 00 00  00 00 00 00  00 00 00 00  00 FF 00 00  ........ ........
0380: 00 FF 00 00  00 FF 00 00  00 FF 00 00  00 FF 00 00  ........ ........
0390: 00 FF 00 00  00 FF 00 00  00 FF 00 00  00 FF 00 00  ........ ........
... Skipped same lines ...
03B0: 00 FF 00 00  00 00 00 00  00 00 00 00  00 00 00 00  ........ ........
03C0: 00 00 00 00  00 00 00 00  00 00 00 00  00 00 00 00  ........ ........
03D0: 00 00 00 00  00 00 00 00  00 00 00 00  00 00 00 00  ........ ........
... Skipped same lines ...
0570: 00 FF 00 00  00 FF 00 00  00 FF 00 00  00 FF 90 EE  ........ ........
0580: 90 FF 90 EE  90 FF 90 EE  90 FF 90 EE  90 FF 90 EE  ........ ........
0590: 90 FF 90 EE  90 FF 90 EE  90 FF 90 EE  90 FF 90 EE  ........ ........
05A0: 90 FF 90 EE  90 FF 90 EE  90 FF 90 EE  90 FF 00 00  ........ ........
05B0: 00 FF 00 00  00 FF 00 00  00 FF 00 00  00 FF 00 00  ........ ........
05C0: 00 FF 00 00  00 FF 00 00  00 00 00 00  00 00 00 00  ........ ........
05D0: 00 00 00 00  00 00 00 00  00 00 00 00  00 00 00 00  ........ ........
05E0: 00 00 00 00  00 00 00 00  00 00 00 00  00 00 00 00  ........ ........
... Skipped same lines ...
0760: 00 00 00 00  00 00 00 00  00 00 00 00  00 FF 00 00  ........ ........
0770: 00 FF 90 EE  90 FF 90 EE  90 FF 90 EE  90 FF 90 EE  ........ ........
0780: 90 FF 90 EE  90 FF 90 EE  90 FF 90 EE  90 FF 90 EE  ........ ........
0790: 90 FF 90 EE  90 FF 90 EE  90 FF 90 EE  90 FF 90 EE  ........ ........
```



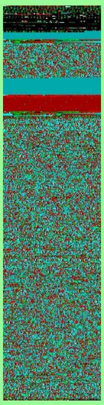
```
0000: 50 4B 03 04  0A 00 00 00  00 00 AE A1  1A 43 00 00  PK...... ......C..
0010: 00 00 00 00  00 00 00 00  00 00 06 00  1C 00 63 72  ........ ......cr
0020: 6F 73 73 2F  55 54 09 00  03 57 38 1B  52 54 AF 67  oss/UT.. .W8.RT.g
0030: 52 75 78 0B  00 01 04 E9  03 00 00 04  E9 03 00 00  Rux..... ........
0040: 50 4B 03 04  0A 00 00 00  00 00 CB A4  1A 43 00 00  PK...... ......C..
0050: 00 00 00 00  00 00 00 00  00 00 0C 00  1C 00 63 72  ........ ......cr
0060: 6F 73 73 2F  62 75 69 6C  64 2F 55 54  09 00 03 2E  oss/buil d/UT....
0070: 3E 1B 52 54  AF 67 52 75  78 0B 00 01  04 E9 03 00  >.RT.gRu x.......
0080: 00 04 E9 03  00 00 50 4B  03 04 0A 00  00 00 00 00  ......PK ........
0090: CB A4 1A 43  00 00 00 00  00 00 00 00  00 00 00 00  ...C.... ........
00A0: 15 00 1C 00  63 72 6F 73  73 2F 62 75  69 6C 64 2F  ....cros s/build/
00B0: 62 69 6E 75  74 69 6C 73  2F 55 54 09  00 03 2E 3E  binutils /UT....>
00C0: 1B 52 54 AF  67 52 75 78  0B 00 01 04  E9 03 00 00  .RT.gRux ........
00D0: 04 E9 03 00  00 50 4B 03  04 14 00 00  00 08 00 CB  .....PK. ........
00E0: A4 1A 43 C5  CC 89 F1 4A  00 00 00 5A  00 00 00 1F  ..C....J ...Z....
00F0: 00 1C 00 63  72 6F 73 73  2F 62 75 69  6C 64 2F 62  ...cross /build/b
0100: 69 6E 75 74  69 6C 73 2F  69 6E 73 74  61 6C 6C 2E  inutils/ install.
0110: 73 68 55 54  09 00 03 2E  3E 1B 52 49  AF 67 52 75  shUT.... >.RI.gRu
0120: 78 0B 00 01  04 E9 03 00  00 04 E9 03  00 00 53 56  x....... ......SV
0130: D4 4F CA CC  D3 2F CE E0  E2 CA 2F 48  2D 4A 2C C9  .O.../.. ../H-J,.
0140: CC CF B3 55  CA CC 2B 2E  49 CC C9 51  E2 E2 4A C9  ...U..+. I..Q..J.
0150: 8F 4F 2A CD  CC 49 B1 4D  4B CC 29 4E  05 71 A1 72  .O*..I.M K.)N.q.r
0160: B6 25 45 A5  60 7E 72 4E  6A 62 1E 54  9A 4B 4F 41  .%E.`~rN jb.T.KOA
0170: 4F 1F 28 A9  07 34 0F 00  50 4B 03 04  14 00 00 00  O.(..4.. PK......
0180: 08 00 CB A4  1A 43 AF 58  CA 76 4A 00  00 00 58 00  .....C.X .vJ...X.
0190: 00 00 1D 00  1C 00 63 72  6F 73 73 2F  62 75 69 6C  ......cr oss/buil
01A0: 64 2F 62 69  6E 75 74 69  6C 73 2F 62  75 69 6C 64  d/binuti ls/build
01B0: 2E 73 68 55  54 09 00 03  2E 3E 1B 52  49 AF 67 52  .shUT... .>.RI.gR
01C0: 75 78 0B 00  01 04 E9 03  00 00 04 E9  03 00 00 53  ux...... .......S
01D0: 56 D4 4F CA  CC D3 2F CE  E0 E2 CA 2F  48 2D 4A 2C  V.O.../. .../H-J,
01E0: C9 CC CF B3  55 4A 2A CD  CC 49 51 E2  E2 4A C9 8F  ....UJ*. .IQ..J..
01F0: 07 33 6D 4B  8A 4A 53 41  BC CC BC E2  92 C4 9C 1C  .3mK.JSA ........
```



```
0000: 25 50 44 46  2D 31 2E 34  0A 25 E2 E3  CF D3 0A 34  %PDF-1.4 .%.....4
0010: 20 30 20 6F  62 6A 0A 0A  3C 3C 0A 2F  46 69 6C 74   0 obj.. <<./Filt
0020: 65 72 20 2F  46 6C 61 74  65 44 65 63  6F 64 65 0A  er /Flat eDecode.
0030: 2F 4C 65 6E  67 74 68 20  31 38 37 38  0A 3E 3E 0A  /Length  1878.>>.
0040: 73 74 72 65  61 6D 0A EF  DC FE 1A 8B  18 70 8A 68  stream.. .....p.h
0050: 2F 63 4F AB  89 A4 62 31  82 82 98 5F  7B AB E2 F3  /cO...b1 ..._{...
0060: 8F 90 F0 CF  8A 7D C5 73  13 E2 53 5A  92 BD 70 76  .....}.s ..SZ..pv
0070: F0 5A F1 8F  35 DA 04 EE  45 9C EA E1  BE C3 68 50  .Z..5... E.....hP
0080: 2B 44 FB EC  23 7B 03 A6  50 BA A0 BD  AF E6 DC 72  +D..#{.. P......r
0090: C6 FE D4 27  9A 7C D6 EE  E2 C5 B3 FE  6B 32 05 9C  ...'.|.. ....k2..
00A0: E4 E7 C9 A8  C3 B2 D9 F8  92 50 2A E3  7A 58 0A 0D  ........ .P*.zX..
00B0: 44 13 67 E0  15 09 80 CF  44 A8 FD 21  AD 0F D6 1B  D.g..... D..!....
00C0: BD 17 7A CC  1C 52 73 5E  8E BE 03 3D  73 2B 1C 7D  ..z..Rs^ ...=s+.}
00D0: D1 56 CB 80  FD 9C 96 65  87 DF 50 BD  84 B9 6E 4F  .V.....e ..P...nO
00E0: B3 3F A2 60  F9 D4 51 A9  44 86 60 FA  EA 77 67 55  .?.`..Q. D.`..wgU
00F0: D2 66 7C 55  7F F0 AC 5C  9E 01 B9 03  8F 78 DB 3B  .f|U...¥ .....x.;
0100: 63 09 F5 A1  5A DB 2B 59  53 C6 6A 66  69 39 65 64  c...Z.+Y S.jfi9ed
0110: B9 48 56 8C  54 CC 55 28  15 03 48 61  F5 07 55 50  .HV.T.U( ..Ha..UP
0120: A5 71 51 EA  62 A2 05 78  AC 9E 0A 82  71 A0 E4 F9  .qQ.b..x ....q...
0130: D3 4B 61 47  44 83 E0 BF  CC 5F 05 8F  04 11 5C 3C  .KaGD... ._....¥<
0140: 31 11 B0 15  84 DB F9 DC  04 4F 82 A7  0A A3 2D 5F  1....... .O....-_
0150: F2 8B 55 FA  AC 1D 60 4E  61 10 F2 08  24 A7 8A 5E  ..U...`N a...$..^
0160: 53 50 EA 0C  23 B5 0F 10  C2 8E 97 88  F7 96 E1 4F  SP..#... .......O
0170: DE 14 06 C5  E7 04 54 44  53 30 64 58  5C AF BE AA  ......TD S0dX¥...
0180: 66 BA 97 4C  63 45 13 75  B4 91 2B 9E  5A 96 8E 57  f..LcE.u ..+.Z..W
0190: 57 34 4B CF  96 9E 68 03  33 01 74 A4  25 6D CA B6  W4K...h. 3.t.%m..
01A0: 15 2A F6 02  0F 5D 19 33  22 BD 8A 7C  CD 2C 94 DC  .*...].3 "..|.,..
01B0: 91 EF D8 8D  4A D9 3F CC  87 FE 8B 78  3D D6 25 9E  ....J.?. ...x=.%.
01C0: 4D D6 27 B3  23 39 31 88  FA D5 BF 1B  A9 C1 DC 81  M.'.#91. ........
01D0: 74 41 45 B7  2F 00 B3 F3  BF D6 72 4C  95 43 BF 6C  tAE./... ..rL.C.l
01E0: 48 87 3D 9B  FF 50 A2 88  9F 19 30 0B  F5 BC E8 A2  H.=..P.. ..0.....
01F0: BC D4 C1 BC  AD 4F 52 92  13 7C 9C 98  01 5C B8 96  .....OR. .|...¥..
```



```
0000: 4D 5A 90 00  03 00 00 00  04 00 00 00  FF FF 00 00  MZ...... ........
0010: B8 00 00 00  00 00 00 00  40 00 00 00  00 00 00 00  ........ @.......
0020: 00 00 00 00  00 00 00 00  00 00 00 00  00 00 00 00  ........ ........
0030: 00 00 00 00  00 00 00 00  00 00 00 00  80 00 00 00  ........ ........
0040: 0E 1F BA 0E  00 B4 09 CD  21 B8 01 4C  CD 21 54 68  ........ !..L.!Th
0050: 69 73 20 70  72 6F 67 72  61 6D 20 63  61 6E 6E 6F  is progr am canno
0060: 74 20 62 65  20 72 75 6E  20 69 6E 20  44 4F 53 20  t be run  in DOS 
0070: 6D 6F 64 65  2E 0D 0D 0A  24 00 00 00  00 00 00 00  mode.... $.......
0080: 50 45 00 00  4C 01 11 00  73 6A D0 66  00 20 01 00  PE..L... sj.f. ..
0090: 4D 04 00 00  E0 00 06 01  0B 01 02 28  00 28 00 00  M....... ...(.(..
00A0: 00 44 00 00  00 02 00 00  70 15 00 00  00 10 00 00  .D...... p.......
00B0: 00 40 00 00  00 00 40 00  00 10 00 00  00 02 00 00  .@....@. ........
00C0: 04 00 00 00  01 00 00 00  04 00 00 00  00 00 00 00  ........ ........
00D0: 00 E0 01 00  00 06 00 00  8B EA 01 00  03 00 40 01  ........ ......@.
00E0: 00 00 20 00  00 10 00 00  00 00 10 00  00 10 00 00  .. ..... ........
00F0: 00 00 00 00  10 00 00 00  00 00 00 00  00 00 00 00  ........ ........
0100: 00 80 00 00  48 05 00 00  00 00 00 00  00 00 00 00  ....H... ........
0110: 00 00 00 00  00 00 00 00  00 00 00 00  00 00 00 00  ........ ........
0120: 00 B0 00 00  98 01 00 00  00 00 00 00  00 00 00 00  ........ ........
0130: 00 00 00 00  00 00 00 00  00 00 00 00  00 00 00 00  ........ ........
0140: 04 A0 00 00  18 00 00 00  00 00 00 00  00 00 00 00  ........ ........
0150: 00 00 00 00  00 00 00 00  18 81 00 00  C8 00 00 00  ........ ........
0160: 00 00 00 00  00 00 00 00  00 00 00 00  00 00 00 00  ........ ........
0170: 00 00 00 00  00 00 00 00  2E 74 65 78  74 00 00 00  .;...... .text...
0180: C4 27 00 00  00 10 00 00  00 28 00 00  00 06 00 00  .'...... .(......
0190: 00 00 00 00  00 00 00 00  00 00 00 00  60 00 00 60  ........ ....`..`
01A0: 2E 64 61 74  61 00 00 00  10 00 00 00  00 40 00 00  .data... .....@..
01B0: 00 02 00 00  00 2E 00 00  00 00 00 00  00 00 00 00  ........ ........
01C0: 00 00 00 00  40 00 00 C0  2E 72 64 61  74 61 00 00  ....@... .rdata..
01D0: C0 02 00 00  00 50 00 00  00 04 00 00  00 30 00 00  .....P.. .....0..
01E0: 00 00 00 00  00 00 00 00  00 00 00 00  40 00 00 40  ........ ....@..@
01F0: 2F 34 00 00  00 00 00 00  B8 08 00 00  00 60 00 00  /4...... .....`..
```



```
0000: FF D8 FF E1  33 FE 45 78  69 66 00 00  49 49 2A 00  ....3.Ex if..II*.
0010: 08 00 00 00  0A 00 0E 01  02 00 20 00  00 00 86 00  ........ .. .....
0020: 00 00 0F 01  02 00 06 00  00 00 A6 00  00 00 10 01  ........ ........
0030: 02 00 19 00  00 00 AC 00  00 00 12 01  03 00 01 00  ........ ........
0040: 00 00 01 00  00 00 1A 01  05 00 01 00  00 00 CC 00  ........ ........
0050: 00 00 1B 01  05 00 01 00  00 00 D4 00  00 00 28 01  ........ ......(.
0060: 03 00 01 00  00 00 02 00  00 00 32 01  02 00 14 00  ........ ..2.....
0070: 00 00 DC 00  00 00 13 02  03 00 01 00  00 00 02 00  ........ ........
0080: 00 00 69 87  04 00 01 00  00 00 F0 00  00 00 00 0F  ..i..... ........
0090: 00 00 20 20  20 20 20 20  20 20 20 20  20 20 20 20  ..
00A0: 20 20 20 20  20 20 20 20  20 20 20 20  20 20 20 20  
00B0: 20 00 43 61  6E 6F 6E 00  43 61 6E 6F  6E 20 50 6F   .Canon. Canon Po
00C0: 77 65 72 53  68 6F 74 20  53 58 31 33  30 20 49 53  werShot  SX130 IS
00D0: 00 FF FF FF  FF FF FF FF  B4 00 00 00  01 00 00 00  ........ ........
00E0: B4 00 00 00  01 00 00 00  32 30 31 33  3A 31 30 3A  ........ 2013:10:
00F0: 32 30 20 31  35 3A 32 30  3A 33 30 00  21 00 9A 82  20 15:20 :30.!...
0100: 05 00 01 00  00 00 82 02  00 00 9D 82  05 00 01 00  ......;. ........
0110: 00 00 8A 02  00 00 27 88  03 00 01 00  00 00 C8 00  ......'. ........
0120: 00 00 30 88  03 00 01 00  00 00 04 00  00 00 00 90  ..0..... ........
0130: 07 00 04 00  00 00 30 32  33 30 03 90  02 00 14 00  ......02 30......
0140: 00 00 92 02  00 00 04 90  02 00 14 00  00 00 A6 02  ........ ........
0150: 00 00 01 91  07 00 04 00  00 00 01 02  03 00 02 91  ........ ........
0160: 05 00 01 00  00 00 BA 02  00 00 01 92  0A 00 01 00  ........ ........
0170: 00 00 C2 02  00 00 02 92  05 00 01 00  00 00 CA 02  ........ ........
0180: 00 00 04 92  0A 00 01 00  00 00 D2 02  00 00 05 92  ........ ........
0190: 05 00 01 00  00 00 DA 02  00 00 07 92  03 00 01 00  ........ ........
01A0: 00 00 05 00  00 00 09 92  03 00 01 00  00 00 10 00  ........ ........
01B0: 00 00 0A 92  05 00 01 00  00 00 E2 02  00 00 7C 92  ........ ......|.
01C0: 07 00 C0 0A  00 00 EA 02  00 00 86 92  07 00 08 01  ........ ........
01D0: 00 00 AA 0D  00 00 00 A0  07 00 04 00  00 00 30 31  ........ ......01
01E0: 30 30 01 A0  03 00 01 00  00 00 01 00  00 00 02 A0  00...... ........
01F0: 03 00 01 00  00 00 80 02  00 00 03 A0  03 00 01 00  ........ ........
```