

HP-41C Mini Chess Program by Valentin Albillo
PPC Calculator Journal V8 N6 P66 Aug-Dec 1981

```
01 LBL "MCHESS" ;5 by 5 Mini Chess Program
02 CLRG
03 FIX 00
04 CF 29
05 18.049           ;HP-41C registers 18 thru 49
06 XROM 30,03       ;RDTAX reads data from cards
07 SF 11            ;Lines 5 & 6 may be replaced
08 OFF              ;by XEQ "MCHREGS" if no card
09 9                ;reader is readily available
10 STO 16
11 ST- 17
12 6.5
13 STO 92
14 ST- 56
15 5.09
16 STO 93
17 ST- 57
18 4.03
19 STO 94
20 ST- 58
21 1.01
22 STO 83
23 STO 84
24 STO 85
25 STO 86
26 STO 87
27 ST- 65
28 ST- 66
29 ST- 67
30 ST- 68
31 ST- 69
32 INT
33 -
34 STO 95
35 ST- 59
36 2.05
37 STO 96
38 ST- 60
39 "A"
40 50.091
41 SIGN
42 LBL 01
43 RCL IND L
44 X=0?
45 ASTO IND L
46 ISG L
47 GTO 01
48 SREG 74          ;SigmaREG
49 CLS              ;CLSigma
50 ASTO 79
51 FS? 55
52 XEQ "P"          ;Print Board (Program "P" Line 1)
53 CF 23
54 AON
55 "HP 1ST?"
56 PROMPT
57 AOFF
58 FC?C 23
59 GTO 00
60 LBL 99
61 "FROM?"
62 PROMPT
63 "I"
64 X<0?
65 GTO 04
66 X=0?
67 GTO 05
```

```

68 XEQ 06
69 STO 00
70 "TO?"
71 PROMPT
72 XEQ 06
73 STO 01
74 CLX
75 X<> IND 00
76 STO IND 01
77 XEQ 07
78 FC? 55
79 GTO 00
80 FS? 00
81 XEQ "P"          ;Print Board (Program "P" Line 1)
82 LBL 00
83 "I MOVE"
84 AVIEW
85 CF 17
86 FS? 55
87 SF 17
88 FS? 55
89 XEQ "5"          ;Flag 55 Toggle (Program "P" Line 41)
90 PI
91 STO 09
92 96.055
93 STO 02
94 CHS
95 STO 00
96 LBL 11
97 RCL IND 02
98 SIGN
99 X=0?
100 GTO 00
101 LASTX
102 X<0?
103 XEQ 12
104 LBL 00
105 DSE 02
106 GTO 11
107 FS? 17
108 XEQ "5"          ;Flag 55 Toggle (Program "P" Line 41)
109 RCL 09
110 PI
111 X=Y?
112 GTO 05
113 "YOU"
114 -25
115 RCL 00
116 X<Y?
117 GTO 04
118 CLX
119 X<> IND 12
120 STO IND 13
121 XEQ 08
122 "FROM "
123 RCL 12
124 XEQ 09
125 ">" TO "
126 RCL 13
127 XEQ 09
128 RCL 00
129 FRC
130 RCL 22
131 *
132 FRC
133 X#0?
134 ">", CHECK"
135 BEEP
136 AVIEW
137 FS? 55

```

```
138 XEQ "P"           ;Print Board (Program "P" Line 1)
139 FC? 55
140 STOP
141 GTO 99
142 LBL 07
143 60
144 RCL 01
145 X>Y?
146 RTN
147 2
148 RCL IND 01
149 X>Y?
150 RTN
151 "PIECE?"
152 PROMPT
153 STO IND 01
154 RTN
155 LBL 08
156 ABS
157 2
158 X<Y?
159 RTN
160 92
161 RCL 13
162 X<Y?
163 RTN
164 -5.09
165 STO IND 13
166 RTN
167 LBL 04
168 ASTO X
169 "CHECKMATE"
170 AVIEW
171 BEEP
172 CLA
173 ARCL X
174 >" WON"
175 PROMPT
176 LBL 05
177 "STALEMATE"
178 BEEP
179 PROMPT
180 LBL 09
181 INT
182 ENTER
183 ENTER
184 9
185 /
186 INT
187 +
188 51
189 -
190 ARCL X
191 RTN
192 LBL 06
193 ENTER
194 ENTER
195 1
196 -
197 5
198 /
199 INT
200 2
201 /
202 -
203 46
204 +
205 RTN
206 LBL 12
207 STO 03
```

208 ABS
209 CF 05
210 CF 06
211 CF 07
212 2
213 X>Y?
214 GTO 13
215 X<>Y
216 30
217 +
218 XEQ IND X
219 RCL IND X
220 STO 04
221 LBL 14
222 RCL 02
223 STO 05
224 LBL 15
225 RCL IND 04
226 ST+ 05
227 RCL 05
228 XEQ 08
229 FS? 18
230 GTO 00
231 X<0?
232 GTO 00
233 CF 09
234 X=0?
235 SF 09
236 XEQ 12
237 FS? 05
238 GTO 00
239 FS? 09
240 GTO 15
241 LBL 00
242 ISG 04
243 GTO 14
244 RTN
245 LBL 36
246 SF 07
247 LBL 33
248 SF 05
249 LBL 32
250 LBL 34
251 LBL 35
252 RTN
253 LBL 13
254 SF 06
255 RCL 02
256 9
257 XEQ 09
258 FS? 18
259 1
260 X=0?
261 XEQ 12
262 RCL 02
263 RCL 22
264 XEQ 09
265 FS? 18
266 CLX
267 X>0?
268 XEQ 12
269 RCL 02
270 8
271 XEQ 09
272 FS? 18
273 RTN
274 X<=0?
275 RTN
276 LBL 12
277 CF 08

278 STO 07
279 FRC
280 1 E2
281 *
282 STO 06
283 RCL Z
284 STO 08
285 .4
286 FS? 07
287 ST- 06
288 FS? 06
289 XEQ 12
290 FC? 07
291 XEQ 13
292 RCL 00
293 RCL 06
294 X<=Y?
295 RTN
296 RCL 03
297 FS? 08
298 -5.09
299 STO IND 08
300 CLX
301 STO IND 02
302 56.096
303 STO 11
304 STO 09
305 CF 19
306 LBL 21
307 RCL IND 11
308 SIGN
309 X=0?
310 GTO 00
311 LASTX
312 X<=0?
313 GTO 00
314 XEQ 07
315 FS? 19
316 GTO 04
317 LBL 00
318 ISG 11
319 GTO 21
320 RCL 09
321 STO 00
322 RCL 02
323 STO 12
324 RCL 08
325 STO 13
326 LBL 04
327 RCL 03
328 STO IND 02
329 RCL 07
330 STO IND 08
331 RTN
332 LBL 12
333 .5
334 ST+ 06
335 92
336 RCL 08
337 X<Y?
338 RTN
339 SF 08
340 9
341 ST+ 06
342 RTN
343 LBL 13
344 FS? 06
345 GTO 13
346 RCL 03
347 30

348 -
349 RCL IND X
350 STO 01
351 LBL 03
352 RCL 08
353 STO 10
354 LBL 10
355 RCL IND 01
356 ST+ 10
357 RCL 10
358 XEQ 08
359 FS? 18
360 GTO 00
361 XEQ 12
362 X=Y?
363 RTN
364 FS? 05
365 GTO 00
366 LASTX
367 X=0?
368 GTO 10
369 LBL 00
370 ISG 01
371 GTO 03
372 RTN
373 LBL 13
374 RCL 08
375 RCL 22
376 XEQ 00
377 RCL 08
378 8
379 LBL 00
380 XEQ 09
381 FS? 18
382 RTN
383 LBL 12
384 INT
385 6
386 X#Y?
387 RTN
388 .41
389 ST+ 06
390 RDN
391 RTN
392 LBL 07
393 CF 01
394 CF 02
395 CF 03
396 2
397 X>Y?
398 GTO 12
399 X<>Y
400 30
401 +
402 XEQ IND X
403 RCL IND X
404 STO 14
405 LBL 28
406 RCL 11
407 STO 15
408 LBL 29
409 RCL IND 14
410 ST+ 15
411 RCL 15
412 XEQ 08
413 FS? 18
414 GTO 00
415 X>0?
416 GTO 00
417 CF 10

418 X=0?
419 SF 10
420 XEQ 13
421 FS? 19
422 RTN
423 FS? 01
424 GTO 00
425 FS? 10
426 GTO 29
427 LBL 00
428 ISG 14
429 GTO 28
430 RTN
431 LBL 36
432 SF 03
433 LBL 33
434 SF 01
435 LBL 32
436 LBL 34
437 LBL 35
438 RTN
439 LBL 12
440 SF 02
441 RCL 11
442 RCL 17
443 XEQ 09
444 FS? 18
445 1
446 X=0?
447 XEQ 13
448 FS? 19
449 RTN
450 RCL 11
451 RCL 20
452 XEQ 00
453 FS? 19
454 RTN
455 RCL 11
456 RCL 21
457 LBL 00
458 XEQ 09
459 FS? 18
460 RTN
461 X#0?
462 X>0?
463 RTN
464 LBL 13
465 FRC
466 ABS
467 1 E2
468 *
469 FS? 03
470 .4
471 FS? 03
472 -
473 FS? 02
474 XEQ 13
475 RCL 06
476 X<>Y
477 -
478 RCL 00
479 X<>Y
480 X<=Y?
481 SF 19
482 X<=Y?
483 RTN
484 RCL 09
485 X<>Y
486 X<Y?
487 STO 09

488 RTN
489 LBL 13
490 .5
491 +
492 RCL Z
493 60
494 X<>Y
495 CF 04
496 X<=Y?
497 SF 04
498 RCL Z
499 9
500 FC? 04
501 CLX
502 +
503 RTN
504 LBL 09
505 +
506 LBL 08
507 CF 18
508 SF 25
509 RCL IND X
510 SIGN
511 FS?C 25
512 X=0?
513 SF 18
514 LASTX
515 END

0399C000F7004D43484553538A9C00A91D11181A101419A783
A80B8D1991109311161A15915C9338151A1019915D9339141A
1013915E933A111A1011915391549155915691579341934293
43934493456841915F933B121A10159160933CF14115101A10
19117A0290F4679AF49674B200994A709A4FAC371EF150A917
8CF74850203153543F8E8BAB17B100CF63F546524F4D3F8EF1
4966B50067B600E0000630F3544F3F8EE000063177CE809181
E00007AD37B100AC001EF15001F649204D4F56457EA911AC37
A811AC371EF135723919161A1015153254300C90827A67B100
7666E0000C019702BC00AC111EF135297278B600F3594F551C
12152044B50077CE8C918DE00008F546524F4D202CE00009F5
7F20544F202DE0000920699016426963F87F2C20434845434B
867EAC371EF150AD3784D000630816102145851290814585F6
50494543453F8E918185096112448519122D44851C151A1019
918D85059A73F9434845434B4D4154457E86879B73F57F2057
4F4E8E06F95354414C454D415445868E0A6883831943684015
11419B73850783831141154368124341141640850D3361A905
A906A9071245BE0071131040AEF390F3340F2235CF0F908492
0525E00008AC12B10066B100A90967A809E0000CAC05B100AC
09D0000F019604BF0085CF24A807CF21A805CF20CF22CF2385
0EA8062219E00009AC121167E0000C229016E00009AC127764
E0000C2218E00009AC12857B850DA9083769111B1242369071
381A14AC079306AC06E0000CAD07E0000D2026468523AC081C
151A1019918877918215161A1019163B39A913CF15908B7A67
B100767BB100E00007AC13B50001960BD000152930223C283D
05239182279188850D1A1592061912284485A808199206850E
AC06BE002313104190F33104283A0B9081920A2AE00008AC12
B100E0000C7885AC05B1007667BB00019601B400850E289016
E00000281801E00009AC12850D681679851A14119206758508
A901A902A9031245BD0071131040AEF390F33ECF1C2B3FCF1D
908E920F2FE00008AC12B10064B100A90A67A80AE0000DAC13
85AC01B100AC0AD0001D01960ED0001C85CF24A803CF21A801
CF20CF22CF23850DA8022B9011E00009AC121167E0000DAC13
852B9014E00000AC13852B901501E00009AC12856364850E69
61111B1242AC031A14AC0341AC02E0000D267141207146A813
468529714439850E1A15409071161071A90446A804907119AD
047740850A4009A912A81990F37AAA1967A81276C0000DBD

921 BYTES

HP-41C Mini Chess by Valentin Albillo PPC V8 N6 P66 Aug-Dec 1981

Program Registers Needed: 132

Row 1 (1 - 3)



Row 2 (4 - 8)



Row 3 (9 - 15)



Row 4 (15 - 19)



Row 5 (20 - 25)



Row 6 (25 - 31)



Row 7 (32 - 38)



Row 8 (38 - 43)



Row 9 (44 - 51)



Row 10 (51 - 55)



Row 11 (55 - 61)



Row 12 (61 - 68)



Row 13 (68 - 74)



Row 14 (75 - 80)



Row 15 (81 - 85)



Row 16 (85 - 92)



HP-41C Mini Chess by Valentin Albillo PPC V8 N6 P66 Aug-Dec 1981

Row 17 (92 - 99)



Row 18 (100 - 107)



Row 19 (107 - 113)



Row 20 (114 - 121)



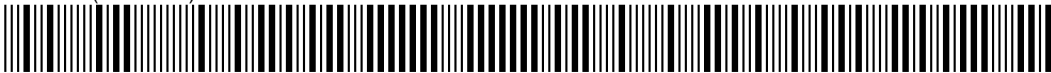
Row 21 (121 - 125)



Row 22 (125 - 130)



Row 23 (131 - 135)



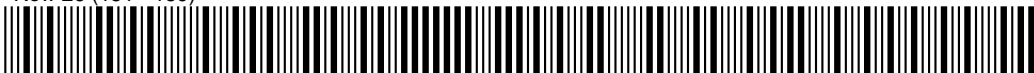
Row 24 (136 - 142)



Row 25 (143 - 151)



Row 26 (151 - 159)



Row 27 (160 - 166)



Row 28 (167 - 169)



Row 29 (170 - 176)



Row 30 (177 - 180)



Row 31 (181 - 191)



Row 32 (192 - 203)



Row 33 (204 - 213)



HP-41C Mini Chess by Valentin Albillo PPC V8 N6 P66 Aug-Dec 1981

Row 34 (214 - 222)



Row 35 (223 - 229)



Row 36 (230 - 236)



Row 37 (237 - 243)



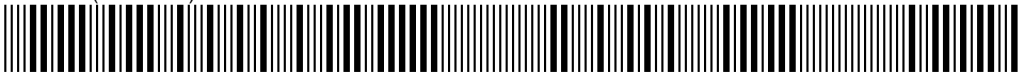
Row 38 (243 - 250)



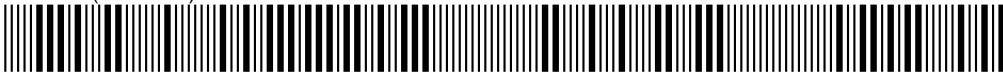
Row 39 (250 - 258)



Row 40 (258 - 265)



Row 41 (265 - 272)



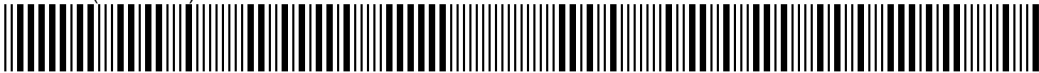
Row 42 (273 - 282)



Row 43 (283 - 289)



Row 44 (289 - 297)



Row 45 (298 - 302)



Row 46 (302 - 309)



Row 47 (310 - 316)



Row 48 (317 - 326)



Row 49 (327 - 335)



Row 50 (335 - 344)



HP-41C Mini Chess by Valentin Albillo PPC V8 N6 P66 Aug-Dec 1981

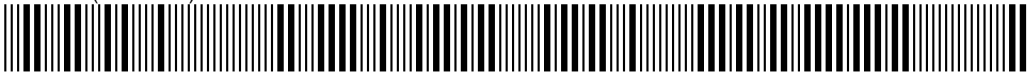
Row 51 (345 - 354)



Row 52 (355 - 361)



Row 53 (361 - 369)



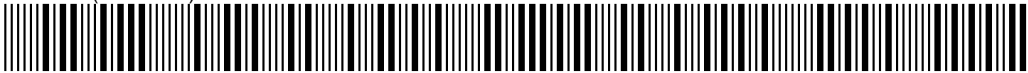
Row 54 (370 - 377)



Row 55 (378 - 387)



Row 56 (388 - 395)



Row 57 (395 - 403)



Row 58 (404 - 412)



Row 59 (412 - 419)



Row 60 (419 - 425)



Row 61 (426 - 432)



Row 62 (432 - 439)



Row 63 (440 - 447)



Row 64 (447 - 453)



Row 65 (454 - 462)



Row 66 (463 - 471)



Row 67 (471 - 480)



HP-41C Mini Chess by Valentin Albillo PPC V8 N6 P66 Aug-Dec 1981

Row 68 (481 - 491)



Row 69 (492 - 499)



Row 70 (500 - 509)



Row 71 (509 - 515)



HP-41C Print Mini Chess Board by Valentin Albillo
PPC Calculator Journal V8 No 6 Pg 66 Aug-Dec 1981

```
01 LBL "P"      ;Print Mini Chess Board
02 ADV
03 SF 12
04 9
05 XROM 29,23 ;SKPCOL
06 49.053
07 STO 13
08 LBL 00
09 XROM 29,02 ;ACCHR
10 2
11 XROM 29,23 ;SKPCOL
12 X<>Y
13 ISG X
14 GTO 00
15 XROM 29,10 ;PRBUF
16 56.06
17 STO 15
18 LBL 01
19 RCL 13
20 XROM 29,02 ;ACCHR
21 LBL 02
22 2
23 XROM 29,23 ;SKPCOL
24 RCL IND 15
25 INT
26 43
27 +
28 RCL IND X
29 XROM 29,04 ;ACSPEC
30 ISG 15
31 GTO 02
32 4.009
33 ST+ 15
34 ISG 13
35 GTO 01
36 ADV
37 ADV
38 ADV
39 CF 12
40 RTN
41 LBL "5"      ;Toggle Flag 55 ON/OFF
42 RCL d
43 STO M
44 ARCL 19
45 ARCL 20
46 RCL M
47 STO d
48 FC?C 15
49 SF 15
50 RCL d
51 STO M
52 >"12"
53 RCL N
54 STO d
55 END
```

0070C000F200508FA80C19A75714191A1015133D01A74212A7
57719673B100A74A15161A10163F022DA7420312A757908F68
14134090F3A744960FB300141A101019920F960DB2008F8F8F
A90C85C000F20035907E91759B139B149075917EAB0FA80F90
7E9175F37F31329076917EC0000D13

112 BYTES

HP-41C Print Board by Valentin Albillo PPC V8 N6 P66 Aug-Dec 1981

Program Registers Needed: 16

Row 1 (1 - 6)



Row 2 (6 - 13)



Row 3 (13 - 19)



Row 4 (20 - 28)



Row 5 (28 - 33)



Row 6 (33 - 41)



Row 7 (41 - 46)



Row 8 (47 - 52)



Row 9 (52 - 55)



HP-41C Mini Chess Load Registers by Valentin Albillo
PPC Calculator Journal Vol 8 No 6 Pg 67 Aug-Dec 1981

```
01 LBL "MCHREG" ;Mini Chess Load Registers
02 AON
03 "LOADING REGS"
04 PSE
05 AOFF
06 1
07 STO 18
08 -1
09 STO 19
10 -10
11 STO 20
12 -8
13 STO 21
14 10
15 STO 22
16 8
17 STO 23
18 -19
19 STO 24
20 -17
21 STO 25
22 -7
23 STO 26
24 -11
25 STO 27
26 19
27 STO 28
28 17
29 STO 29
30 7
31 STO 30
32 11
33 STO 31
34 16.019
35 STO 32
36 24.031
37 STO 33
38 20.023
39 STO 34
40 16.023
41 STO 35
42 STO 36
43 "\10\03\07\AF\FE\B0\00" ;Black King
44 RCL M
45 STO 37
46 "\10\03\07\2F\FC\B0\00" ;Black Queen
47 RCL M
48 STO 38
49 "\10\03\26\EF\7B\B2\00" ;Black Bishop
50 RCL M
51 STO 39
52 "\10\03\66\6E\FF\B6\00" ;Black Knight
53 RCL M
54 STO 40
55 "\10\03\37\CF\DF\33\00" ;Black Rook
56 RCL M
57 STO 41
58 "\10\03\06\6F\D9\B0\00" ;Black Pawn
59 RCL M
60 STO 42
61 "\11\54\04\10\10\40\55" ;Dotted Square
62 RCL M
63 STO 43
64 "\11\82\FD\98\36\6F\E0" ;White Pawn
65 RCL M
66 STO 44
67 "\11\9E\CC\38\30\EC\E7" ;White Rook
```



```

68 RCL M
69 STO 45
70 "\11\BA\9D\99\10\69\FE" ;White Knight
71 RCL M
72 STO 46
73 "\11\BA\DD\18\94\6D\EE" ;White Bishop
74 RCL M
75 STO 47
76 "\11\C2\FC\D8\13\6F\F0" ;White Queen
77 RCL M
78 STO 48
79 "\11\C2\FC\58\11\6F\F0" ;White King
80 RCL M
81 STO 49
82 AON
83 "DONE"
84 PSE
85 AOFF
86 END

```

```

011CC000F7004D43485245478CFC4C4F4144494E4720524547
53898B1191121C1191131C111091141C189115111091161891
171C111991181C111791191C17911A1C1111911B1119911C11
17911D17911E1111911F11161A101119912012141A10131191
2112101A101213912211161A10121391239124F7100307AFFE
B00090759125F71003072FFCB00090759126F7100326EF7BB2
0090759127F71003666EFFF60090759128F7100337CFDF3300
90759129F71003066FD9B0009075912AF71154041010405590
75912BF71182FD98366FE09075912CF7119ECC3830ECE79075
912DF711BA9D991069FE9075912EF711BADD18946DEE907591
2FF711C2FCD8136FF090759130F711C2FC58116FF090759131
8CF4444F4E45898BC0000D4D

```

284 BYTES

HP-41C MCHES Load Regs by Valentin Albillo PPC V8 N6 P66 Aug-Dec 1981

Program Registers Needed: 41

Row 1 (1 - 3)



Row 2 (3 - 5)



Row 3 (6 - 12)



Row 4 (12 - 18)



Row 5 (19 - 24)

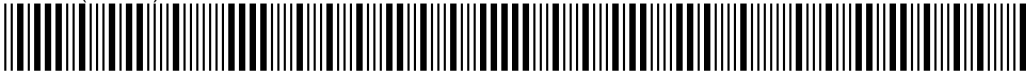


Row 6 (24 - 31)



HP-41C MCHESS Load Regs by Valentin Albillo PPC V8 N6 P66 Aug-Dec 1981

Row 7 (31 - 35)



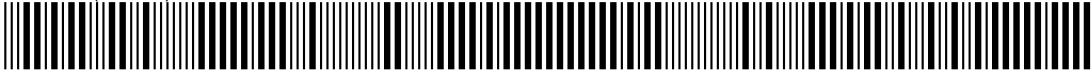
Row 8 (36 - 38)



Row 9 (38 - 42)



Row 10 (43 - 46)



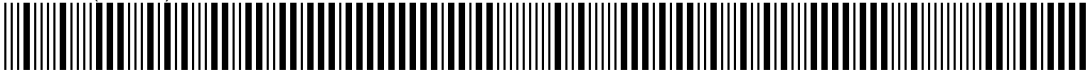
Row 11 (46 - 49)



Row 12 (49 - 52)



Row 13 (52 - 55)



Row 14 (55 - 58)



Row 15 (58 - 61)



Row 16 (61 - 64)



Row 17 (64 - 67)



Row 18 (68 - 71)



Row 19 (71 - 74)



Row 20 (75 - 78)



Row 21 (78 - 81)



Row 22 (82 - 86)

