Corral

If you've ever tried to catch a skittish horse then this game may not be for you because it entirely too accurately reflects the experience. And don't be fooled into thinking that since the game a single dimension (so all you have to worry about is distance) you're going to have an easier time. Whenever you get close to the horse it could move, it could bolt, it could kick, or it could, on rare occasions it could let you catch it.

Still, the game has a certain aesthetic to it. After a game look back on the paths you and the horse took as you wove around each other. The final result can be reminiscent of a dance.

Corral is written by Joseph Larson based on a BASIC game by Colin Keay as found in 'More BASIC Computer Games' edited by David H. Ahl (c) 1979

CORRAL.C | You will need: a C/C++ complier .

```
CORRAL.EXE
17      I   H    C           I         ? 2
18      I   H  C             I         ? 1
19      I H   C              I         ? 2
20      I   C     H          I Bolted! ? 3
21      I      C    H        I         ? 2
22      I        C H         I         ? 1
23      I         C  H       I         ? 1
24      I          C  H      I         ? 1
25      I           C  H     I         ? 1
26      I            C  H    I         ? 1
27      I             C H    I         ? 1
28      I              C H   I         ? 1
29      I               CH   I         ? 1
30      I                CH  I         ? 1
31      I                 C  I Caught!
Yippee! Way to go Cowboy.
```

```
#include <stdio.h>
#include <stdlib.h>
#include <time.h>
#include <math.h>
#include <string.h>

#define SPIN rand() % 10

int p[10] = {0, 1, 2, 3, 3, 2, 2, 1, 0, -1};
int cpos, hpos, turn;
char corral [30], msg [10];

void draw_corral (void) {
  int c;

  for (c = 1; c < 22; c++)
    corral[c] = (c == cpos) ? 'C' : (c == hpos) ? 'H' : ' ';
  printf ("%d\t%s %s ", turn, corral, msg);
  strcpy (msg, "       "); /* 7 spaces */
}

void check_hpos (void) {if (hpos < 1) hpos = 1; if (hpos > 21) hpos = 21;}

int kick (int d) {
  hpos -= 5 * d; check_hpos ();
  strcpy (msg, "Kicked!");
  return (p[SPIN] + 2);
}

void bolt (int d) {
  hpos -= d * (9 + 2 * p[SPIN]); check_hpos ();
  if (abs(hpos - cpos) < 2) hpos += 3 * d;
  strcpy (msg, "Bolted!");
}

int setup (void) {
  int r;

  strcpy (corral, "I                     I"); /* 21 spaces between */
  cpos = 1; turn = 0; r = SPIN;
  hpos = (r < 6) ? r + 13 : r + 3;
  strcpy (msg, "       "); /* 7 spaces */
  return (2 + p[r]);
}

void catch (void) {
  int life, kicked, hits, move, dist, dir;
```

Listing continued on page 2...

```
  life = setup ();
  hits = kicked = 0;
  do {
    turn ++;
    draw_corral();
    dist = abs (hpos - cpos);
    dir = (hpos - cpos > 0) ? 1 : -1;
    if (kicked) {
      puts ("");
      --kicked;
      hpos += dir * (p[SPIN] + 1); check_hpos ();
    } else {
      printf ("? "); scanf ("%d", &move);
      while (move < 1 || move > 5 || cpos + move * dir > 21 || cpos + move * dir
< 1) {
        printf ("Illegal move. Try again ? ");
        scanf ("%d", &move);
      }
      cpos += move * dir;
      hpos += dir * p[SPIN]; check_hpos ();
      if (dist < 2 * move && move > 1) bolt (dir);
      else if (hpos < 2 || hpos > 20 && SPIN < 2 && dist < 8) bolt (dir);
      else if (abs(hpos - cpos) < 3 && SPIN < 3) {
        kicked = kick (dir); hits ++;
      }
    }
  } while (turn < 100 && hpos != cpos && hits < life);
  turn++;
  if (hpos == cpos) {
    strcpy (msg, "Caught!");
    draw_corral ();
    puts ("\nYippee! Way to go Cowboy.");
  } else if (hits >= life) {
    draw_corral ();
    puts ("\nThose kicks landed you in the hospital! Get well soon!");
  } else puts ("\nEnough! You'd do better as a camp cook!");
}

int play_more (void) {
  char yesno[50];

  printf ("\nAnother roundup ? (y/n) ");
  scanf ("%s", yesno);
  return (yesno[0] == 'y') ? 1 : 0;
}

int main (void) {
  puts ("Corral\n-----\n"
  "You are the cowboy trying to catch your horse in the corral!\n"
  "Move toward your horse from 1 to 5 steps at a time.  If you move more than\n"
  "half the distiance between you and the horse he will bolt. He may also\n"
  "bolt if he's pinned to the rail. Also, if you're close enough he may kick!"
  "\n\nAfter the '?' type a digit from 1 to 5 for the cowboy's next move.\n");
  srand (time (NULL));
  do catch (); while (play_more ());
  exit (0);
}
```