#include <stdio.h>

#include <unistd.h>

#include <signal.h>

int getRandomInteger(int n){

return (0);

}

void action1(){

printf("\nReferee: ");

}

void action2(){};

void child(char \*);

int main(int argc, char \*argv[]){

pid\_t pid1, pid2;

printf("This is a 2-players game with a referee\n");

if((pid1=fork()) == 0) child("TOTO");

if((pid2=fork()) == 0) child("TITI");

sleep(1);

signal(SIGUSR1, action1);

while(1){

printf("TOTO plays\n\n");

kill(pid1, SIGUSR1);

pause();

printf("TITI plays\n\n");

kill(pid2, SIGUSR1);

pause();

}

}

void child(char \*s){

int points=0;

int dice, n=10;

while(1){

signal(SIGUSR1, action2); // block myself

pause();

printf("%s: playing my dice\n", s);

dice = getRandomInteger(n);

printf("%s: got %d points\n", s, dice);

points+=dice;

printf("%s: Total so far %d\n\n", s, points);

sleep(3);

if(points >= 100){

printf("%s: game over I won\n", s);

kill(0, SIGTERM);

}

kill(getppid(), SIGUSR1);

}

}