#include <stdio.h>

#include <unistd.h>

#include <fcntl.h>

#include <sys/types.h>

#include <sys/stat.h>

// execute the command "cat scores | grep Villanova"

int main(int argc, char \*\*argv)

{

int pipefd[2];

int pid;

char \*cat\_args[] = {"cat", "scores", NULL};

char \*grep\_args[] = {"grep", "Villanova", NULL};

// make a pipe (fds go in pipefd[0] and pipefd[1])

pipe(pipefd);

pid = fork();

if (pid == 0)

{

// child gets here and handles "grep Villanova"

// replace standard input with input part of pipe

dup2(pipefd[0], 0);

// close unused half of pipe

close(pipefd[1]);

// execute grep

execvp("grep", grep\_args);

}

else

{

// parent gets here and handles "cat scores"

// replace standard output with output part of pipe

dup2(pipefd[1], 1);

// close unused input half of pipe

close(pipefd[0]);

// execute cat

execvp("cat", cat\_args);

}

}