#include<stdio.h>

#include<unistd.h>

#include<fcntl.h>

#include<stdlib.h>

#define size 30

int main()

{

char P2Cmessage[] = "Parent to Child Message";

char C2Pmessage[] = "Child to Parent Message";

char P2Creceiver[size], C2Preceiver[size];

int P2Cfd[2], C2Pfd[2];

int returnstatusP2C = pipe(P2Cfd);

if(returnstatusP2C == -1)

{

printf("Error during P2C pipe creation...\n");

exit(1);

}

int returnstatusC2P = pipe(C2Pfd);

if(returnstatusC2P == -1)

{

printf("Error during C2P pipe creation...\n");

exit(1);

}

int returnstatusfork = fork();

if(returnstatusfork == -1)

{

printf("Error during fork()\n");

}

else if(returnstatusfork == 0)

{

close(P2Cfd[1]);

close(C2Pfd[0]);

read(P2Cfd[0], P2Creceiver, size);

printf("In child message : %s\n",P2Creceiver);

write(C2Pfd[1], C2Pmessage, size);

close(P2Cfd[0]);

close(C2Pfd[1]);

}

else

{

close(P2Cfd[0]);

close(C2Pfd[1]);

write(P2Cfd[1], P2Cmessage, size);

read(C2Pfd[0], C2Preceiver, size);

printf("In parent message : %s\n",C2Preceiver);

close(P2Cfd[1]);

close(C2Pfd[0]);

}

}