15.Write a C program which creates a child process and child process catches a

signal SIGHUP, SIGINT and SIGQUIT. The Parent process send a SIGHUP or

SIGINT signal after every 3 seconds, at the end of 15 second parent send

SIGQUIT signal to child and child terminates by displaying message "My Papa

has Killed me!!!”

#include<stdio.h>

#include<signal.h>

#include<stdlib.h>

void sighup();

void sigint();

void sigquit();

main()

{

int pid,i,j,k;

if ((pid = fork() ) < 0)

{

perror("fork");

exit(1);

}

if ( pid == 0)

{

signal(SIGHUP,sighup);

signal(SIGINT,sigint);

signal(SIGQUIT,sigquit);

for(;;);

}

else

{

j=0;

for(i=1;i<=5;i++)

{

j++;

printf("PARENT: sending SIGHUP Signal : %d\n",j);

kill(pid,SIGHUP);

sleep(3);

printf("PARENT: sending signal : %d\n",j);

kill (pid,SIGINT);

sleep(3);

}

sleep(3);

printf("Parent sending SIGQUIT\n");

kill(pid,SIGQUIT);

}

}

void sighup()

{

signal(SIGHUP,sighup);

printf("Child: I have received sighup\n");

}

void sigint()

{

signal(SIGINT,sigint);

printf("Child: I have received sighINT\n");

}

void sigquit()

{

printf("My papa has killed me\n");

exit(0);

}