

Q1

Write C program perform a dialog between parent and its child by using pipes method (e.g. the parent ask a question and the child answer it).

Code

```
emad@vbox: ~/Desktop/emad1007395/assignment5/Q1
GNU nano 2.5.3      File: q1.c

#include <stdio.h>
#include <stdlib.h>
#include <string.h>

int main(){
    int a[2], b[2], bytesread;
    char message1 [100], message2 [100];
    pipe(a);
    pipe(b);
    if(fork()){ // Parent
        char* phrase1="Hello, What is your name and ID?";
        close (a[0]);
        write (a[1],phrase1,strlen(phrase1)+1);
        close (a[1]);
        wait();
        close (b[1]);
        bytesread = read (b[0],message2,100);
        printf ("- Child: %s\n\n",message2);
        close (b[0]);
    }
    else { // Child
        close (a[1]);
        bytesread = read (a[0],message1,100);
        printf ("\n- Parent: %s\n",message1);
        close (a[0]);
        close (b[0]);
        char* phrase2 = "Hi, I am Emad, my ID is 1007395";
        write (b[1],phrase2,strlen(phrase2)+1);
        close (b[1]);
    }
    return 0;
}
```

^G Get Help ^O Write Out ^W Where Is ^K Cut Text
^X Exit ^R Read File ^\ Replace ^U Uncut Text

Screenshot

```
emad@vbox: ~/Desktop/emad1007395/assignment5/Q1
emad@vbox:~/Desktop/emad1007395/assignment5/Q1$ ./a.out
- Parent: Hello, What is your name and ID?
- Child: Hi, I am Emad, my ID is 1007395

emad@vbox:~/Desktop/emad1007395/assignment5/Q1$
```