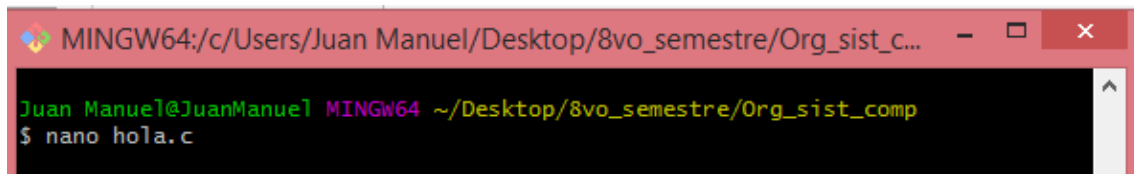
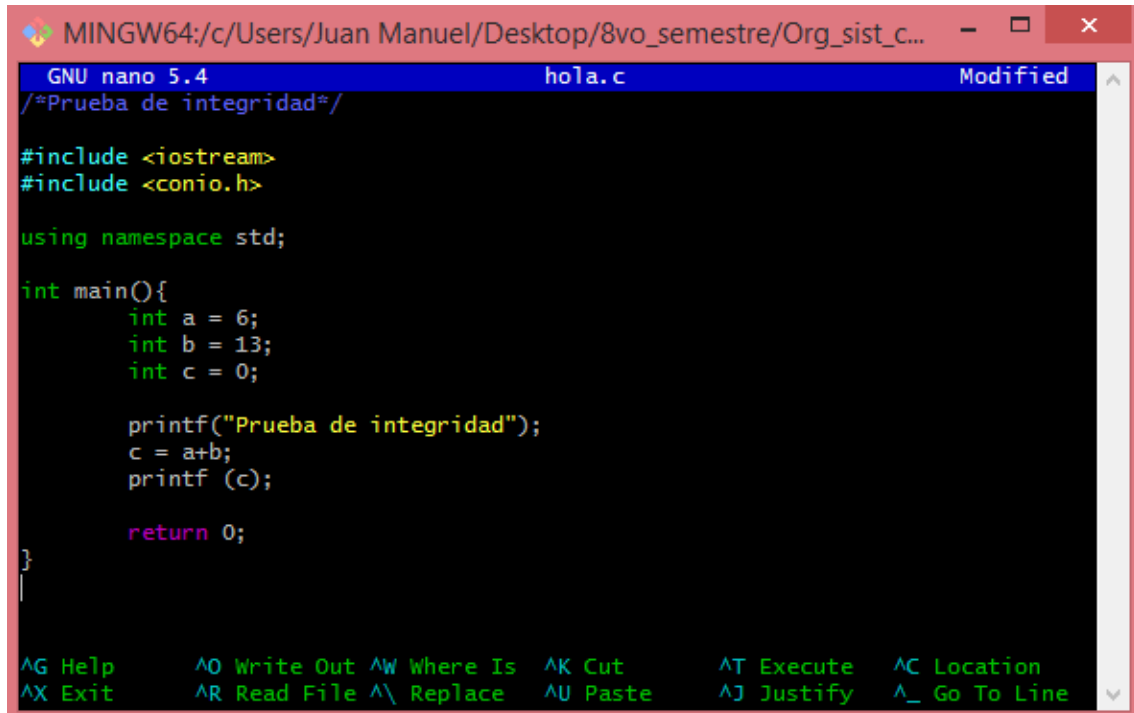


Creando archivo ".c"



```
MINGW64:/c:/Users/Juan Manuel/Desktop/8vo_semestre/Org_sist_c...
Juan Manuel@JuanManuel MINGW64 ~/Desktop/8vo_semestre/Org_sist_comp
$ nano hola.c
```

Editando archivo ".c"



```
MINGW64:/c:/Users/Juan Manuel/Desktop/8vo_semestre/Org_sist_c...
GNU nano 5.4 hola.c Modified
/*Prueba de integridad*/

#include <iostream>
#include <conio.h>

using namespace std;

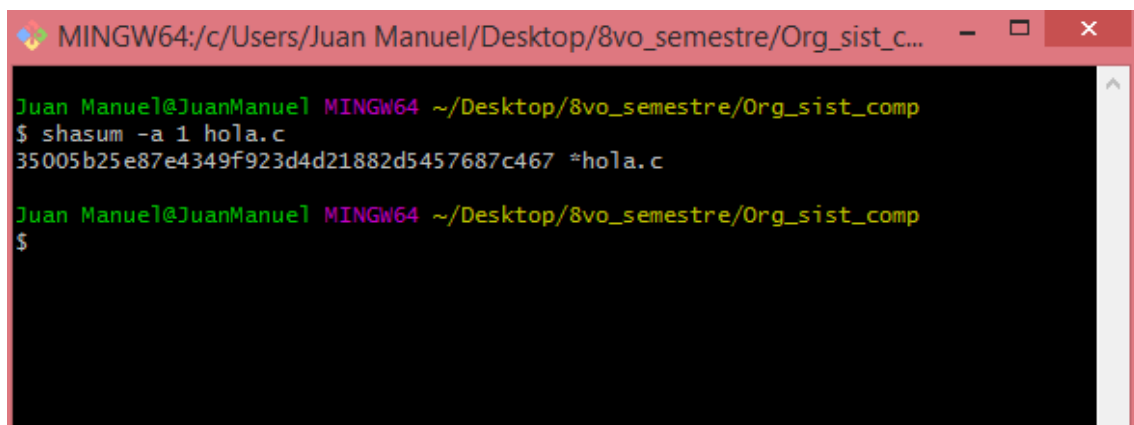
int main(){
    int a = 6;
    int b = 13;
    int c = 0;

    printf("Prueba de integridad");
    c = a+b;
    printf (c);

    return 0;
}
|

^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute   ^C Location
^X Exit      ^R Read File ^\ Replace   ^U Paste     ^J Justify   ^_ Go To Line
```

Obteniendo la firma digital (SHA 1) del archivo en cuestión



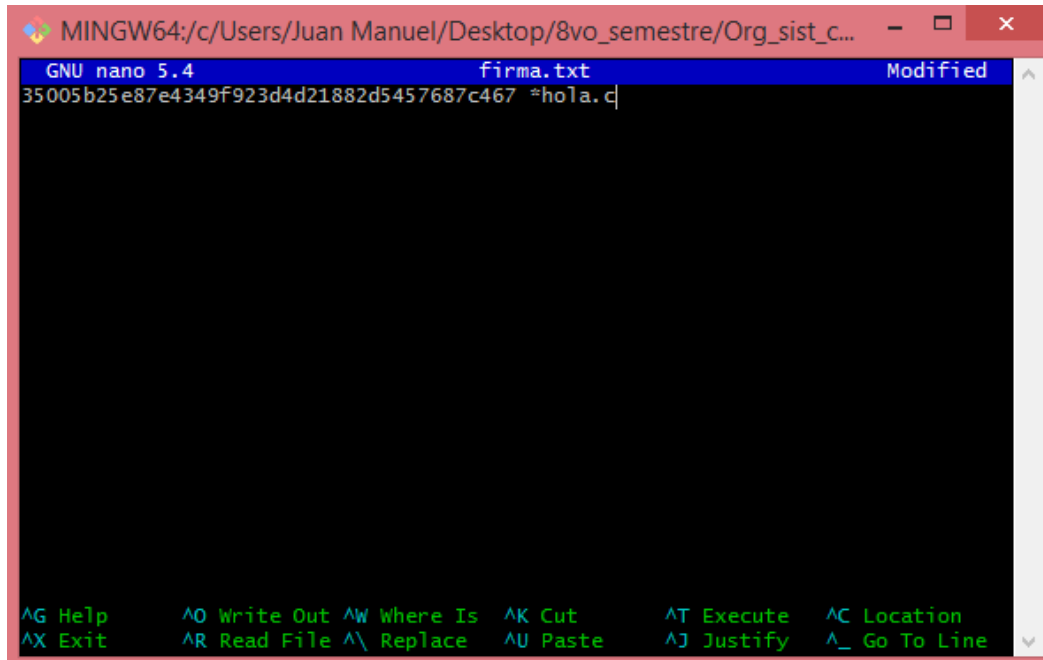
```
MINGW64:/c:/Users/Juan Manuel/Desktop/8vo_semestre/Org_sist_c...
Juan Manuel@JuanManuel MINGW64 ~/Desktop/8vo_semestre/Org_sist_comp
$ shasum -a 1 hola.c
35005b25e87e4349f923d4d21882d5457687c467 *hola.c

Juan Manuel@JuanManuel MINGW64 ~/Desktop/8vo_semestre/Org_sist_comp
$
```

Creando el archivo de firma

```
Juan Manuel@JuanManuel MINGW64 ~/Desktop/8vo_semestre/Org_sist_comp
$ nano firma.txt
```

Editando el archivo con el SHA 1 del archivo original



The screenshot shows the GNU nano 5.4 text editor. The title bar indicates the file is 'firma.txt' and it has been modified. The content of the file is the SHA-1 hash '35005b25e87e4349f923d4d21882d5457687c467' followed by a space and the text '*hola.c'. The bottom status bar shows various keyboard shortcuts for nano.

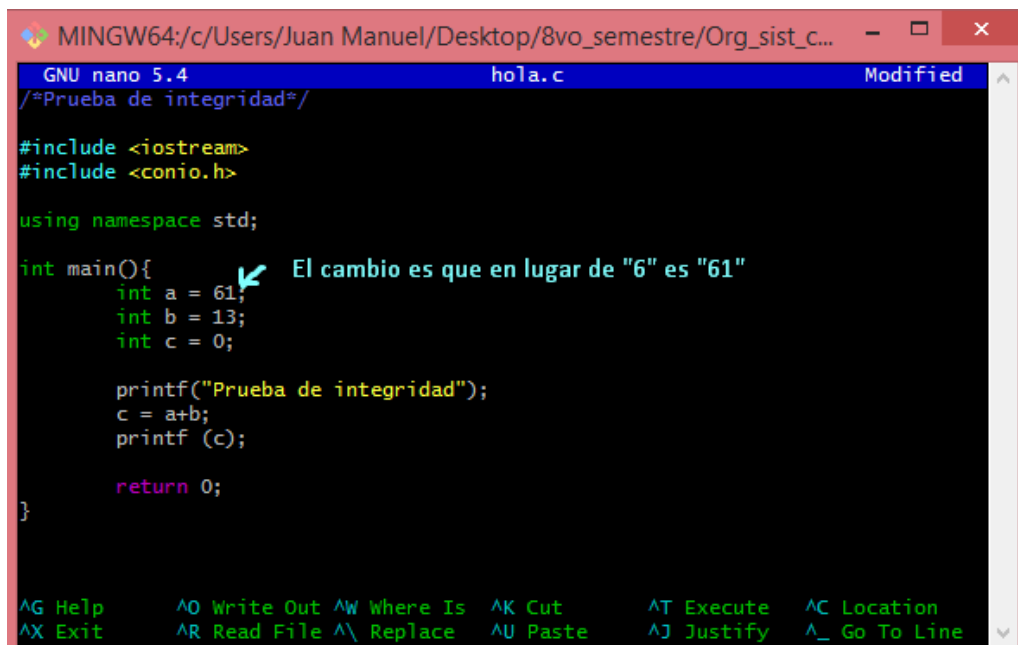
```
GNU nano 5.4 firma.txt Modified
35005b25e87e4349f923d4d21882d5457687c467 *hola.c|

^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute   ^C Location
^X Exit      ^R Read File ^\ Replace   ^U Paste     ^J Justify   ^_ Go To Line
```

Editando el archivo “hola.c” para cambiarlo un poco

```
Juan Manuel@JuanManuel MINGW64 ~/Desktop/8vo_semestre/Org_sist_comp
$ nano hola.c
```

Cambiando



The screenshot shows the GNU nano 5.4 text editor with the file 'hola.c'. The code is a C program that prints the sum of two numbers. A blue arrow points to the number '6' in the line 'int a = 6;', with a text annotation 'El cambio es que en lugar de "6" es "61"'. The code includes standard headers and uses the std namespace.

```
MINGW64:/c/Users/Juan Manuel/Desktop/8vo_semestre/Org_sist_comp
GNU nano 5.4 hola.c Modified
/*Prueba de integridad*/

#include <iostream>
#include <conio.h>

using namespace std;

int main(){
    int a = 61;
    int b = 13;
    int c = 0;

    printf("Prueba de integridad");
    c = a+b;
    printf (c);

    return 0;
}

^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute   ^C Location
^X Exit      ^R Read File ^\ Replace   ^U Paste     ^J Justify   ^_ Go To Line
```

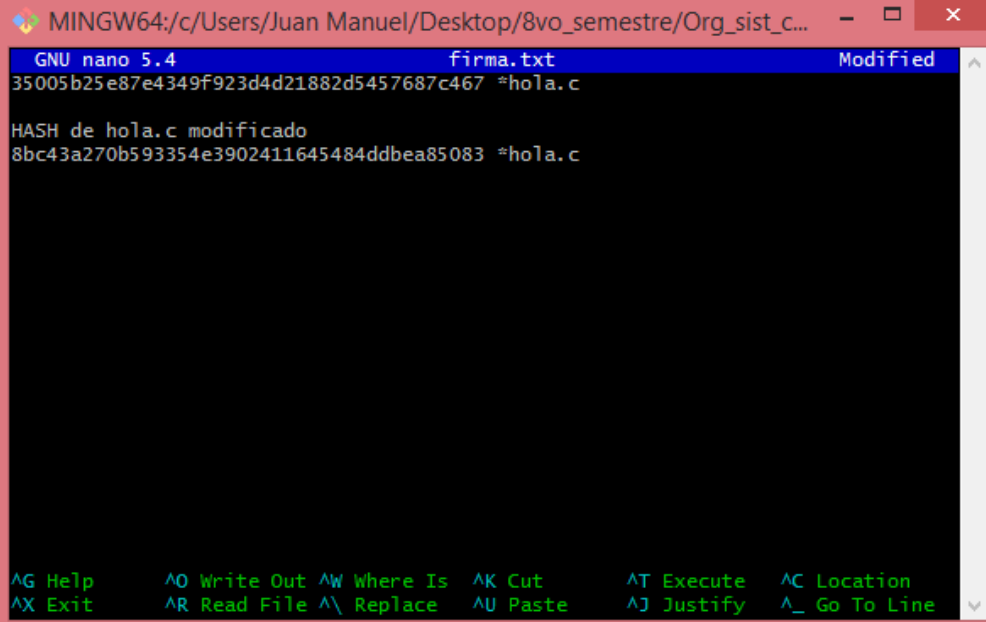
Obteniendo el nuevo HASH del archivo cambiado

```
Juan Manuel@JuanManuel MINGW64 ~/Desktop/8vo_semestre/Org_sist_comp
$ shasum -a 1 hola.c
8bc43a270b593354e3902411645484ddbea85083 *hola.c
```

Cambiando el archivo “.txt” de las firmas

```
Juan Manuel@JuanManuel MINGW64 ~/Desktop/8vo_semestre/Org_sist_comp
$ nano firma.txt
```

Pegando el HASH modificado

A screenshot of a terminal window titled "MINGW64:/c/Users/Juan Manuel/Desktop/8vo_semestre/Org_sist_c...". Inside the terminal, the GNU nano 5.4 text editor is open, editing a file named "firma.txt". The editor shows the original hash "35005b25e87e4349f923d4d21882d5457687c467 *hola.c" and a new hash "8bc43a270b593354e3902411645484ddbea85083 *hola.c" with the note "HASH de hola.c modificado" above it. The bottom status bar of the nano editor displays various keyboard shortcuts like ^G Help, ^O Write Out, ^W Where Is, ^K Cut, ^T Execute, ^C Location, ^X Exit, ^R Read File, ^\ Replace, ^U Paste, ^J Justify, and ^_ Go To Line.

```
MINGW64:/c/Users/Juan Manuel/Desktop/8vo_semestre/Org_sist_c...
GNU nano 5.4          firma.txt          Modified
35005b25e87e4349f923d4d21882d5457687c467 *hola.c

HASH de hola.c modificado
8bc43a270b593354e3902411645484ddbea85083 *hola.c

^G Help    ^O Write Out ^W Where Is ^K Cut     ^T Execute  ^C Location
^X Exit    ^R Read File ^\ Replace  ^U Paste   ^J Justify  ^_ Go To Line
```

Nos damos cuenta que por muy mínimo que sea el cambio el HASH nunca va a ser el mismo

```
Juan Manuel@JuanManuel MINGW64 ~/Desktop/8vo_semestre/Org_sist_comp
$ cat firma.txt
35005b25e87e4349f923d4d21882d5457687c467 *hola.c

HASH de hola.c modificado
8bc43a270b593354e3902411645484ddbea85083 *hola.c
```