	Carátula para entrega de prácticas	
Facultad de Ingeniería	Laboratorio de docencia	

Laboratorios de computación salas A y B

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<i>Asignatura:</i>	FUNDAMENTOS DE PROGRAMACION
<i>Grupo:</i>	03
<i>No de Práctica(s):</i>	PRACTICA No. 10
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<i>No. de Equipo de cómputo</i>	
<i>No. de Lista o</i>	
<i>Semestre:</i>	2020-1
<i>Fecha de entrega:</i>	28/OCTUBRE/2019
<i>Observaciones:</i>	

CALIFICACIÓN: _____

DEPURACION DE PROGRAMAS

.OBETIVO.

Aprender las técnicas básicas de depuración de programas en C para revisar de manera precisa el flujo de ejecución de un programa y el valor de las variables; en su caso, corregir posibles errores.

INTRODUCCION.

La depuración de un programa es la forma de saber si un programa contiene errores o no, así mismo también nos ayuda a corregir dichos errores.

Se dice que un programa esta depurado cuando está libre de errores.

Cuando se depura un programa se hace un seguimiento del funcionamiento de dicho programa y se van estudiando los valores de las distintas variables, así como los resultados obtenidos en las operaciones.

Una vez depurado el programa se solucionan los posibles errores encontrados y se procede a depurar otra vez.

Estas acciones se repiten hasta que el programa no contiene ningún tipo de errores, tanto en tiempo de programación como en tiempo de ejecución.

ACTIVIDAD 1.

Utilizar GDB para encontrar la utilidad del programa y describir su funcionalidad.

Parar esta primera actividad pudimos comprobar y al mismo tiempo ponernos por primera vez en contacto con este programa "GDB" para así poder ver para que sirve, cuáles son sus ventajas.

Y una vez que íbamos siguiendo paso a paso las indicaciones de la practica en primer lugar nos percatamos de que se usaban otros comando para poder ejecutar el programa y correrlo posteriormente se utilizaba gdb para ya entrar con el programa y ver su comportamiento lo cual, debo decir hacer un paréntesis por motivos del laboratorio tuvimos que conectarnos a una maquina Linux para que se llevara a cabo, pero este problema no paso en casa ya que siguiendo las indicaciones y comandos sin problema se puso ejecutar el programa, y se verá a continuación en los dos siguientes actividades.

Cuando el programa comenzó a correr lo primero que pudimos percatarnos era que aparecía algo como esto (gdb) el cual equivale a el \$ de git, los cuales están esperando recibir una indicación o comando. Siguiendo los pasos, resultó ser que gdb es muy útil para saber con exactitud en donde es que se encuentra un error de sintaxis el cual no permite que el programa corra, nos muestra por así decirlo el

editor de texto para que se vea notorio el error.

Y vaya que eso es de gran ventaja pues no tenemos que estarlo revisando si no ya sabemos con exactitud en donde está el error.

A continuación se muestra la evidencia de ello.

```
E ~
hugo morones@LAPTOP-FGPEUFLH ~
$ gcc actividad1.c -o actividad1

hugo morones@LAPTOP-FGPEUFLH ~
$ ./actividad1
-bash: ./actividad1: No such file or directory

hugo morones@LAPTOP-FGPEUFLH ~
$ ./actividad1
Ingresa un número: 4

El resultado es: 4

hugo morones@LAPTOP-FGPEUFLH ~
$ gcc -g actividad1.c -o actividad1

hugo morones@LAPTOP-FGPEUFLH ~
$ gdb ./actividad1
GNU gdb (GDB) (Cygwin 8.1.1-1) 8.1.1
Copyright (C) 2018 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/gpl.html>
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law. Type "show copying"
and "show warranty" for details.
This GDB was configured as "x86_64-pc-cygwin".
Type "show configuration" for configuration details.
For bug reporting instructions, please see:
<http://www.gnu.org/software/gdb/bugs/>.
Find the GDB manual and other documentation resources online at:
<http://www.gnu.org/software/gdb/documentation/>.
For help, type "help".
Type "apropos word" to search for commands related to "word"...
Reading symbols from ./actividad1...done.
(gdb) run
Starting program: /home/hugo morones/actividad1
[New Thread 6152.0x4b5c]
[New Thread 6152.0x4254]
Ingresa un número: 9

El resultado es: 25
[Inferior 1 (process 6152) exited with code 025]
(gdb) list
1      #include <stdio.h>
2
3      void main()
4      {
5          int N, CONT, AS;
6          AS=0;
7          CONT=1;
```

E~

```
hugo morones@LAPTOP-FGPEUFLH ~
$ ./activad1
-bash: ./activad1: No such file or directory

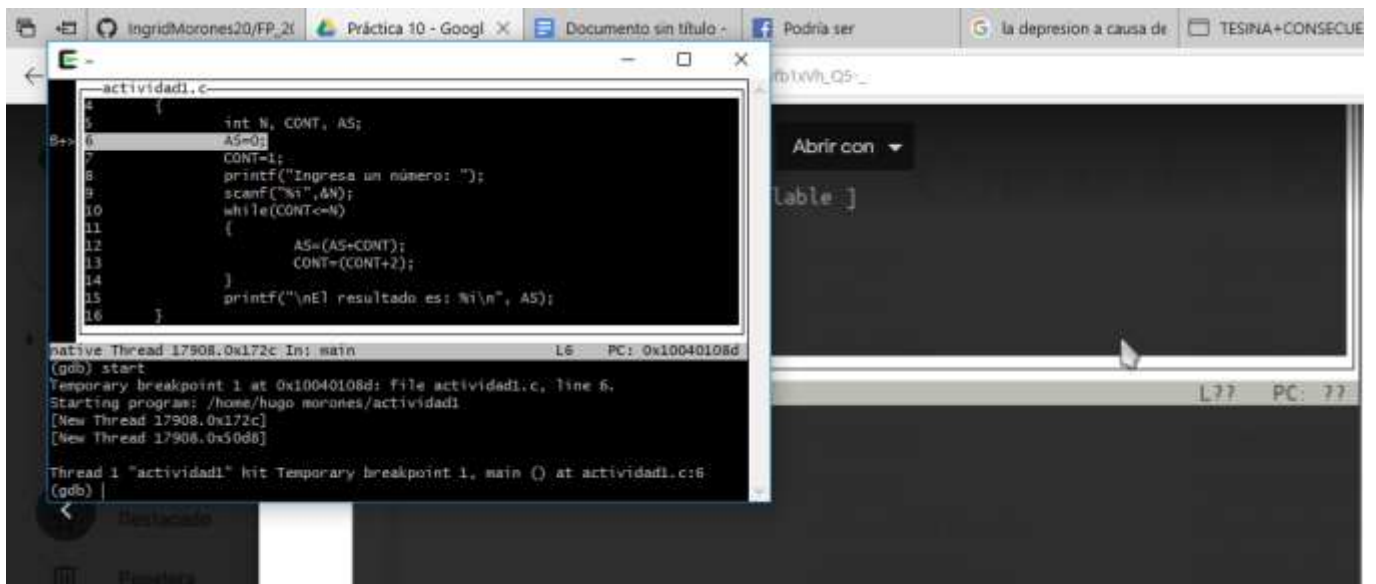
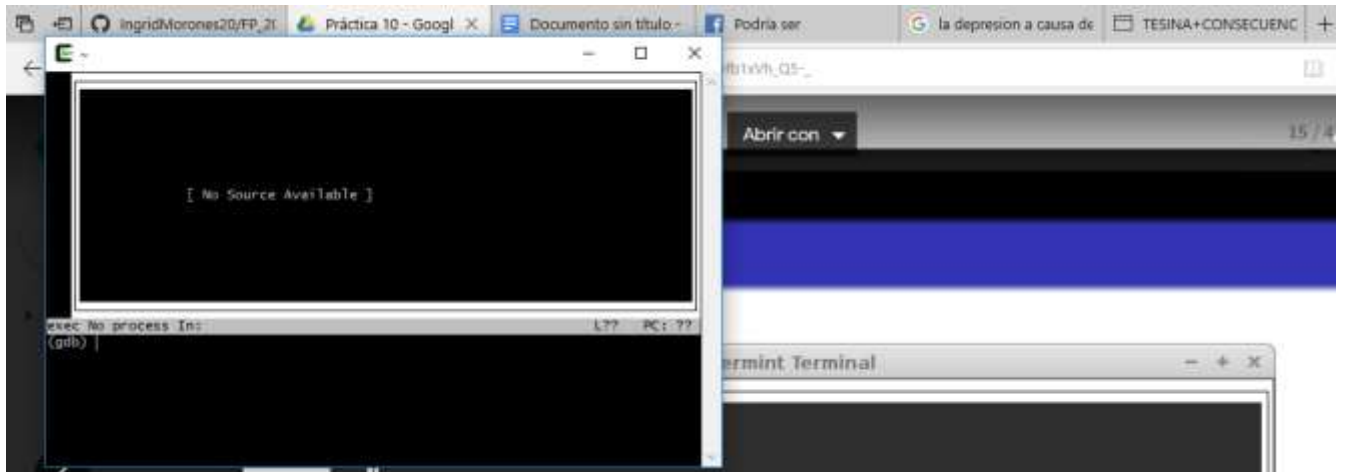
hugo morones@LAPTOP-FGPEUFLH ~
$ ./activad1
Ingresa un número: 4

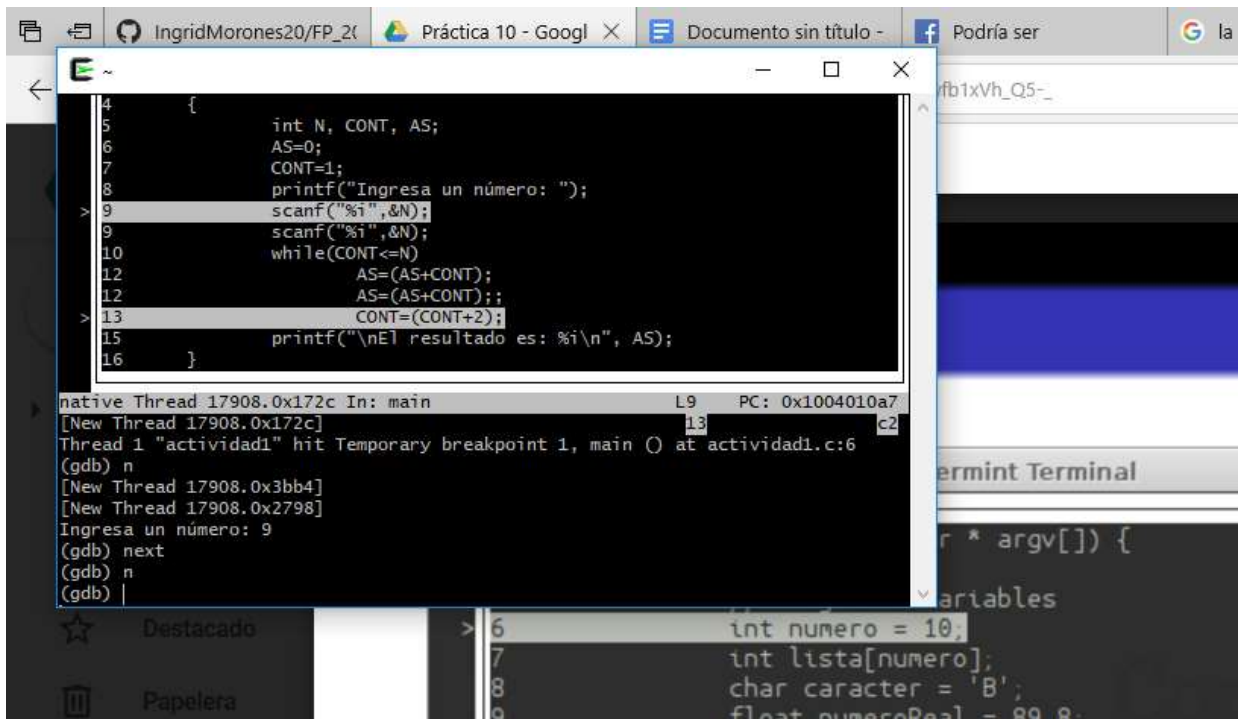
El resultado es: 4

hugo morones@LAPTOP-FGPEUFLH ~
$ gcc -g activad1.c -o activad1

hugo morones@LAPTOP-FGPEUFLH ~
$ gdb ./activad1
GNU gdb (GDB) (Cygwin 8.1.1-1) 8.1.1
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License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/gpl.html>
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<http://www.gnu.org/software/gdb/bugs/>.
Find the GDB manual and other documentation resources online at:
<http://www.gnu.org/software/gdb/documentation/>.
For help, type "help".
Type "apropos word" to search for commands related to "word"...
Reading symbols from ./activad1...done.
(gdb) run
Starting program: /home/hugo morones/activad1
[New Thread 6152.0x4b5c]
[New Thread 6152.0x4254]
Ingresa un número: 9

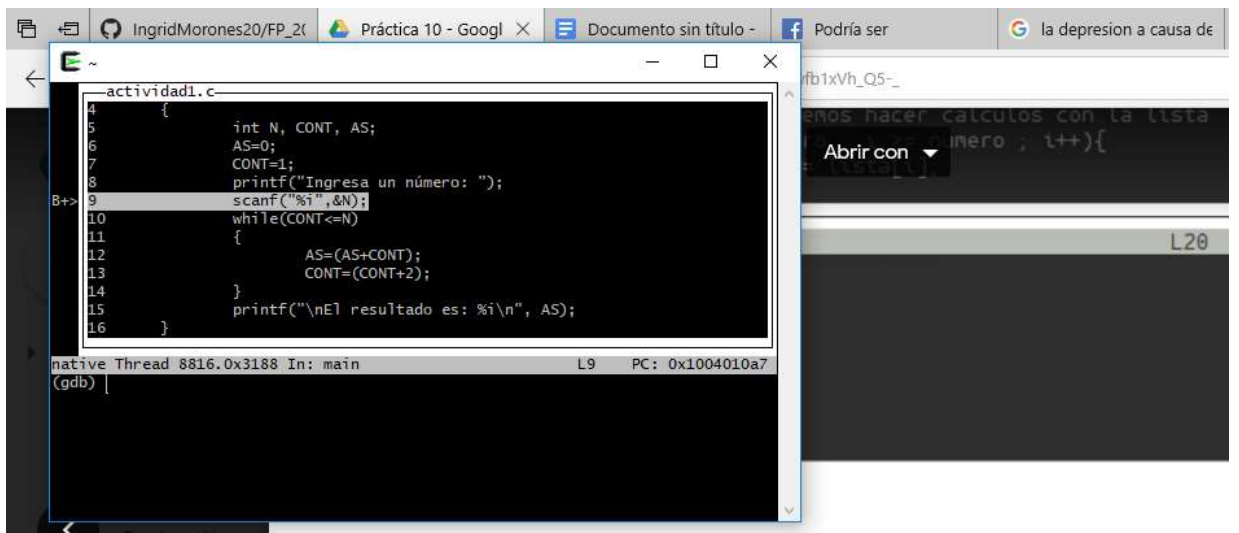
El resultado es: 25
[Inferior 1 (process 6152) exited with code 025]
(gdb) list
1      #include <stdio.h>
2
3      void main()
4      {
5          int N, CONT, AS;
6          AS=0;
7          CONT=1;
8          printf("Ingresa un número: ");
9          scanf("%i",&N);
10         while(CONT<=N)
(gdb) |
```





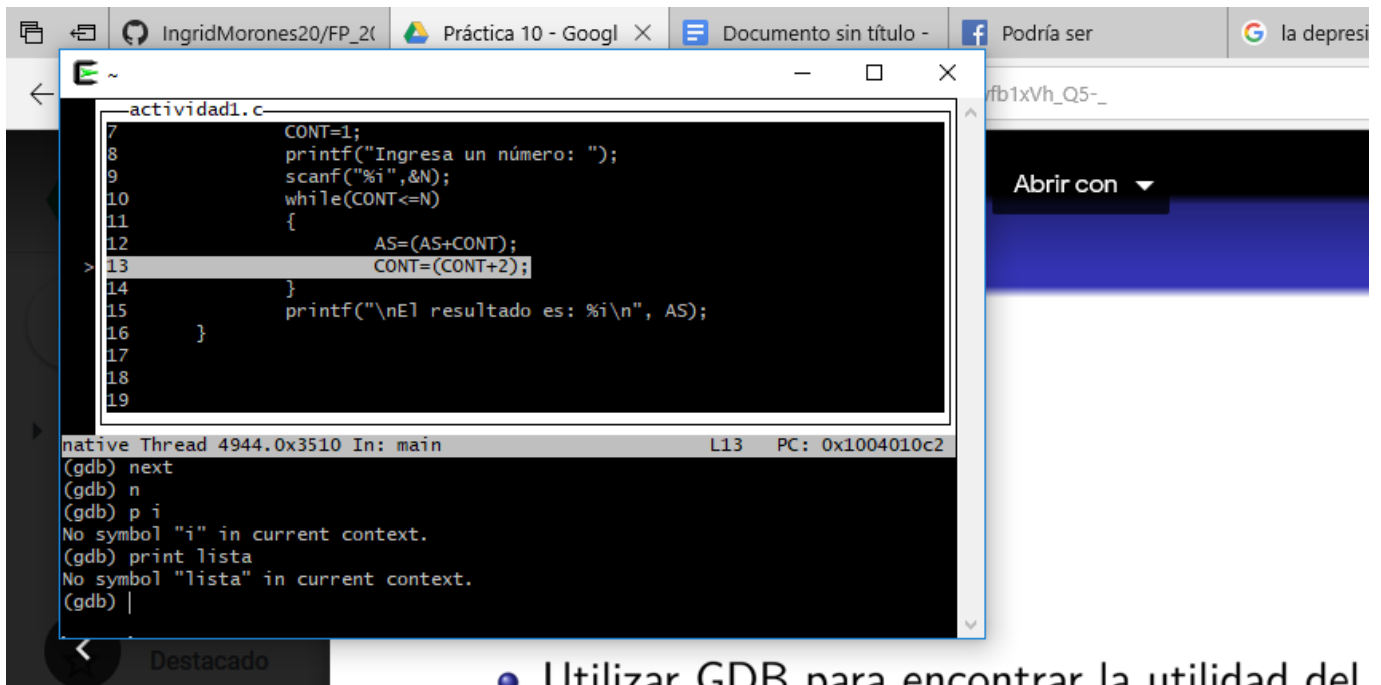
```
4 {
5     int N, CONT, AS;
6     AS=0;
7     CONT=1;
8     printf("Ingresa un número: ");
9     scanf("%i",&N);
10    while(CONT<=N)
11    {
12        AS=(AS+CONT);
13        CONT=(CONT+2);
14    }
15    printf("\nEl resultado es: %i\n", AS);
16 }
```

native Thread 17908.0x172c In: main L9 PC: 0x1004010a7
[New Thread 17908.0x172c]
Thread 1 "actividad1" hit Temporary breakpoint 1, main () at actividad1.c:6
(gdb) n
[New Thread 17908.0x3bb4]
[New Thread 17908.0x2798]
Ingresa un número: 9
(gdb) next
(gdb) n
(gdb) |



```
actividad1.c
4 {
5     int N, CONT, AS;
6     AS=0;
7     CONT=1;
8     printf("Ingresa un número: ");
9     scanf("%i",&N);
10    while(CONT<=N)
11    {
12        AS=(AS+CONT);
13        CONT=(CONT+2);
14    }
15    printf("\nEl resultado es: %i\n", AS);
16 }
```

native Thread 8816.0x3188 In: main L9 PC: 0x1004010a7
(gdb) |



• Utilizar GDB para encontrar la utilidad del

ACTIVIDAD 2.

Utilizar GDB para corregir el programa.

Una vez utilizando gdb no pudimos cerciorar que el programa no estaba correcto había un error de sintaxis.


```
hugo morones@LAPTOP-FGPEUFLH ~  
$ pwd  
/home/hugo morones  
  
hugo morones@LAPTOP-FGPEUFLH ~  
$ ls  
actividad2.c  vim  
  
hugo morones@LAPTOP-FGPEUFLH ~  
$ gcc -w actividad2.c -o actividad2 -lm  
  
hugo morones@LAPTOP-FGPEUFLH ~  
$ ./actividad2  
Ingrese cuántos términos calcular de la serie: X^K/K!  
N= 9 8 9  
  
hugo morones@LAPTOP-FGPEUFLH ~  
$ gcc -g actividad2.c -o actividad2  
  
hugo morones@LAPTOP-FGPEUFLH ~  
$ gdb ./ejemplo1  
GNU gdb (GDB) (Cygwin 8.1.1-1) 8.1.1  
Copyright (C) 2018 Free Software Foundation, Inc.  
License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/gpl.html>  
This is free software: you are free to change and redistribute it.  
There is NO WARRANTY, to the extent permitted by law. Type "show copying"  
and "show warranty" for details.  
This GDB was configured as "x86_64-pc-cygwin".  
Type "show configuration" for configuration details.  
For bug reporting instructions, please see:  
<http://www.gnu.org/software/gdb/bugs/>.  
Find the GDB manual and other documentation resources online at:  
<http://www.gnu.org/software/gdb/documentation/>.  
For help, type "help".  
Type "apropos word" to search for commands related to "word"...  
./ejemplo1: No such file or directory.  
(gdb) quit  
  
hugo morones@LAPTOP-FGPEUFLH ~  
$ gdb ./actividad2  
GNU gdb (GDB) (Cygwin 8.1.1-1) 8.1.1  
Copyright (C) 2018 Free Software Foundation, Inc.  
License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/gpl.html>  
This is free software: you are free to change and redistribute it.  
There is NO WARRANTY, to the extent permitted by law. Type "show copying"  
and "show warranty" for details.  
This GDB was configured as "x86_64-pc-cygwin".  
Type "show configuration" for configuration details.  
For bug reporting instructions, please see:
```



○ Escribe aquí para buscar



```
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law. Type "show copying"
and "show warranty" for details.
This GDB was configured as "x86_64-pc-cygwin".
Type "show configuration" for configuration details.
For bug reporting instructions, please see:
<http://www.gnu.org/software/gdb/bugs/>.
Find the GDB manual and other documentation resources online at:
<http://www.gnu.org/software/gdb/documentation/>.
For help, type "help".
Type "apropos word" to search for commands related to "word"...
./ejemplo1: No such file or directory.
(gdb) quit

hugo morones@LAPTOP-FGPEUFLH ~
$ gdb ./actividad2
GNU gdb (GDB) (Cygwin 8.1.1-1) 8.1.1
Copyright (C) 2018 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/gpl.html>
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law. Type "show copying"
and "show warranty" for details.
This GDB was configured as "x86_64-pc-cygwin".
Type "show configuration" for configuration details.
For bug reporting instructions, please see:
<http://www.gnu.org/software/gdb/bugs/>.
Find the GDB manual and other documentation resources online at:
<http://www.gnu.org/software/gdb/documentation/>.
For help, type "help".
Type "apropos word" to search for commands related to "word"...
Reading symbols from ./actividad2...done.
(gdb) run
Starting program: /home/hugo morones/actividad2
[New Thread 16544.0x3814]
[New Thread 16544.0x416c]
Ingrese cuántos términos calcular de la serie: X^K/K!
N= 6
[Inferior 1 (process 16544) exited with code 0300000000005]
(gdb) list
1      #include <stdio.h>
2      #include <math.h>
3
4      void main()
5      {
6          int K, AP, N;
7          double X, AS;
8          printf("Ingrese cuántos términos calcular de la serie: X^K/K!");
9          printf("\nN=");
10         scanf("%i",N);
(gdb)
```



Escribe aquí para buscar



```

1  actividad2.c
2  {
3      int K, AP, N;
4      double X, AS;
5      printf("Ingrese cuantos terminos calcular de la serie: X^K/K!");
6      printf("\nN=");
7      scanf("%i",&N);
8      printf("X=");
9      scanf("%lf",&X);
10     K=0;
11     AP=1;
12     AS=0;
13     while(K<=N)
14     {
15         AS=AS+pow(X,K)/AP;
16         K=K+1;
17         AP=AP*K;
18     }
19     printf("Resultado=Nle",AS);
20 }
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35

```

Native: No process in)

N=8

[Thread 7812.0x384c exited with code 3221225477]

[Thread 7812.0x4c38 exited with code 3221225477]

[Thread 7812.0x4e1c exited with code 3221225477]

The program is not being run.

(gdb) p i

No symbol "i" in current context.

(gdb) print list

No symbol "list" in current context.

(gdb) print lista

No symbol "lista" in current context.

(gdb) p i

No symbol "i" in current context.

(gdb) display lista

No symbol "lista" in current context.

(gdb) |



Escribe aquí para buscar



```

actividad2.c
5      {
6          int K, AP, N;
7          double X, AS;
8      printf("Ingrese cuántos términos calcular de la serie: X^K/K!");
9      printf("\nN=");
10     scanf("%i", &N);
11     printf("X=");
12     scanf("%lf", &X);
13     K=0;
14     AP=1;
15     AS=0;
16     while(K<=N)
17     {
18         AS=AS+pow(X,K)/AP;
19         K=K+1;
20         AP=AP*K;
21     }
22     printf("Resultado=%le", AS);
23 }
24
25
26
27
28
29
30
31
32
33
34
35

```

```

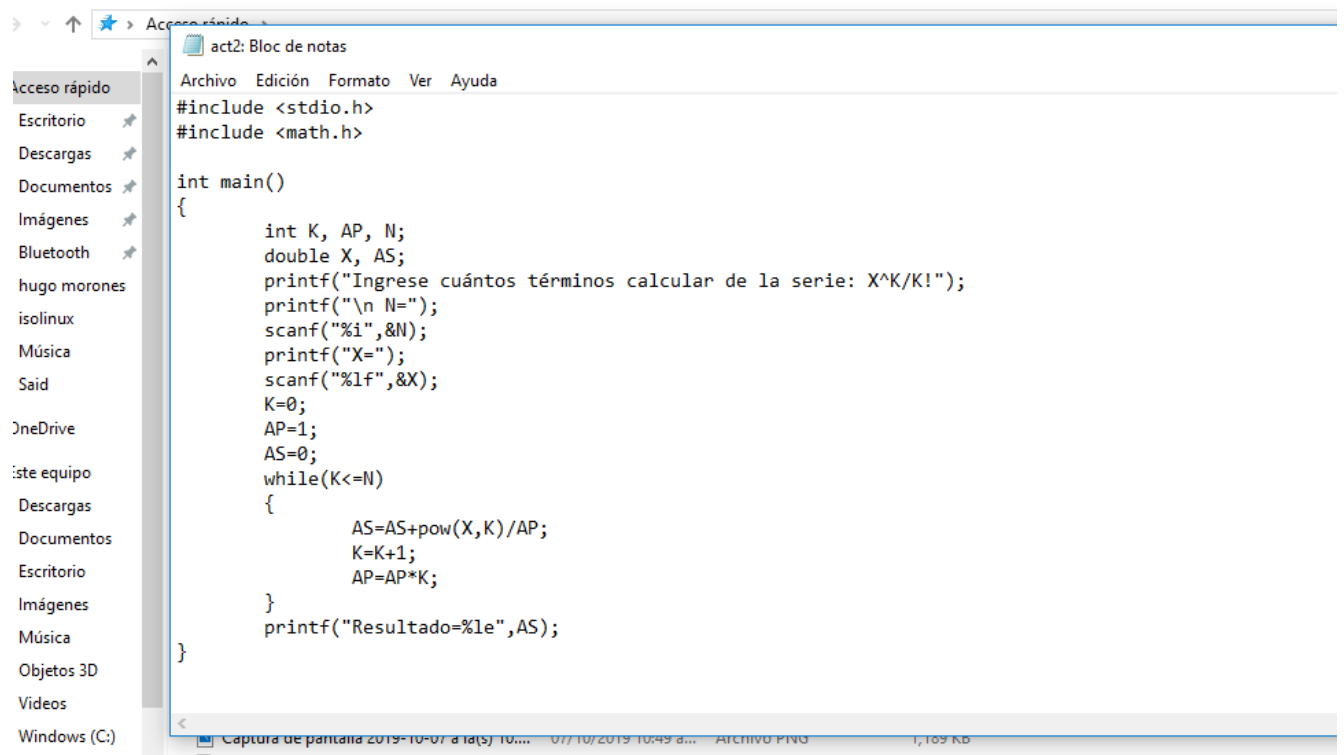
native Thread 14928.0x11f0 In: main
(gdb) start
Temporary breakpoint 1 at 0x10040108d: file actividad2.c, line 8.
Starting program: /home/hugo morones/actividad2
[New Thread 14928.0x11f0]
[New Thread 14928.0x3eb8]

Thread 1 "actividad2" hit Temporary breakpoint 1, main () at actividad2.c:8
(gdb)

```

PROGRAMA CORREGIDO.

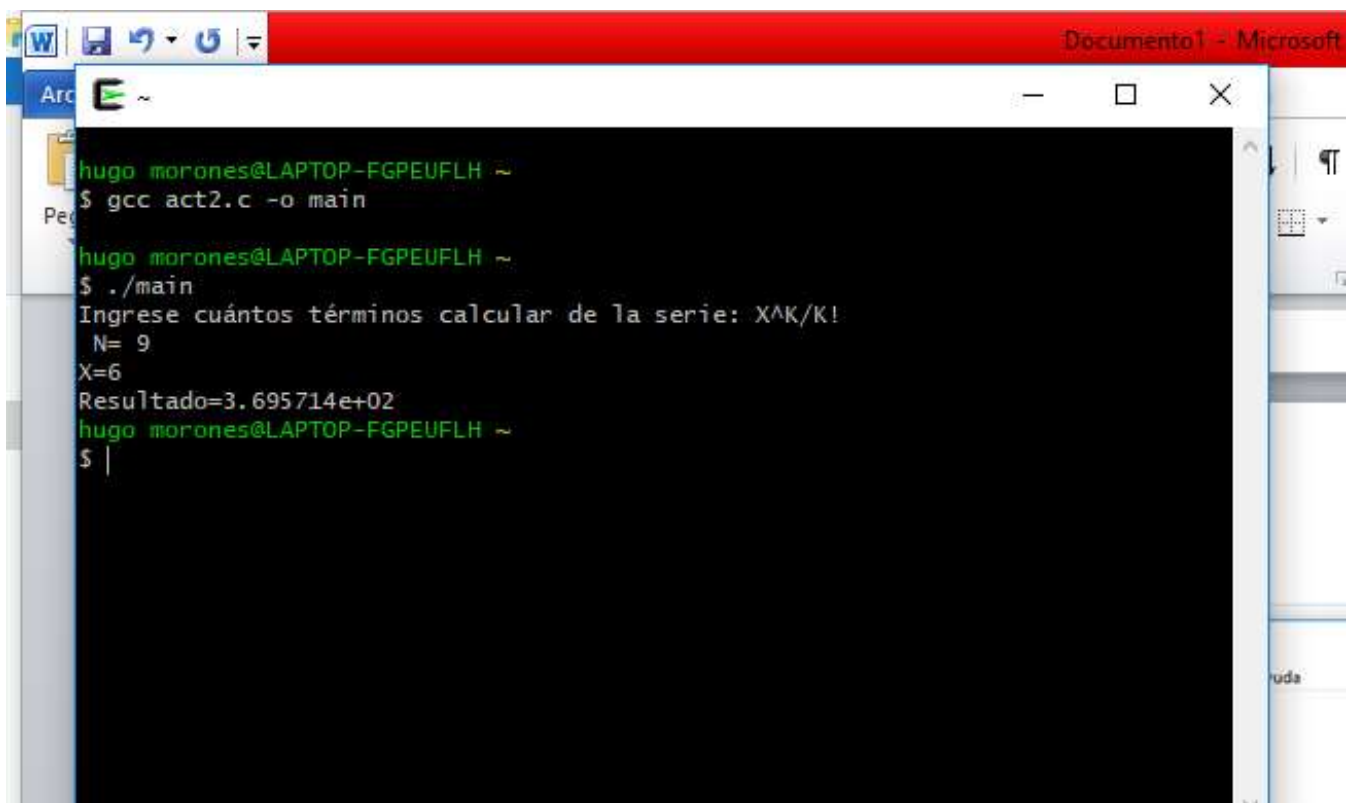
Corregimos la sintaxis del programa para que este corriera correctamente. A continuación esta la sintaxis y el programa compilado y ejecutado.



The screenshot shows a Windows Notepad window titled "act2: Bloc de notas". The menu bar includes "Archivo", "Edición", "Formato", "Ver", and "Ayuda". The left sidebar shows the "Acceso rápido" (Quick Access) view with various folders like "Escritorio", "Descargas", "Documentos", etc. The main text area contains the following C code:

```
#include <stdio.h>
#include <math.h>

int main()
{
    int K, AP, N;
    double X, AS;
    printf("Ingrese cuántos términos calcular de la serie: X^K/K!");
    printf("\n N=");
    scanf("%i",&N);
    printf("X=");
    scanf("%lf",&X);
    K=0;
    AP=1;
    AS=0;
    while(K<=N)
    {
        AS=AS+pow(X,K)/AP;
        K=K+1;
        AP=AP*K;
    }
    printf("Resultado=%le",AS);
}
```



The screenshot shows a terminal window titled "Documento1 - Microsoft". The prompt is "hugo morones@LAPTOP-FGPEUFLH ~". The user enters the following commands and receives the following output:

```
$ gcc act2.c -o main
hugo morones@LAPTOP-FGPEUFLH ~
$ ./main
Ingrese cuántos términos calcular de la serie: X^K/K!
N= 9
X=6
Resultado=3.695714e+02
hugo morones@LAPTOP-FGPEUFLH ~
$ |
```

De igual manera lo probamos con gdb y corrió como deba ser, no nos marco un error, o decía que el programa no podía correr. Por lo que logramos corregir el programa.

```
E ~
hugo morones@LAPTOP-FGPEUFLH ~
$ gcc act2.c -o main

hugo morones@LAPTOP-FGPEUFLH ~
$ ./main
Ingrese cuántos términos calcular de la serie: X^K/K!
N=3
X=6
Resultado=6.100000e+01

hugo morones@LAPTOP-FGPEUFLH ~
$ gcc -g act2.c -o main
-bash: gcc: no se encontró la orden

hugo morones@LAPTOP-FGPEUFLH ~
$ gcc -g atc2.c -o main
gcc: error: atc2.c: No such file or directory
gcc: error fatal: no hay archivos de entrada
compilación terminada.

hugo morones@LAPTOP-FGPEUFLH ~
$ gcc -g act2.c -o main

hugo morones@LAPTOP-FGPEUFLH ~
$ gdb ./main
GNU gdb (GDB) (Cygwin 8.1.1-1) 8.1.1
Copyright (C) 2018 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/gpl.html>
This is free software: you are free to change and redistribute it.
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Type "show configuration" for configuration details.
For bug reporting instructions, please see:
<http://www.gnu.org/software/gdb/bugs/>.
Find the GDB manual and other documentation resources online at:
<http://www.gnu.org/software/gdb/documentation/>.
For help, type "help".
Type "apropos word" to search for commands related to "word"...
Reading symbols from ./main...done.
(gdb) run
Starting program: /home/hugo morones/main
[New Thread 19236.0x5768]
[New Thread 19236.0x565c]
Ingrese cuántos términos calcular de la serie: X^K/K!
N=5
X=7
Resultado=3.297667e+02[Inferior 1 (process 19236) exited normally]
(gdb) |
```




ACTIVIDAD 3.

Utilizar GDB para corregir el programa.

De igual manera pasaba con este programa. Por lo que observando su sintaxis pudimos resolver el error

```
hugo morones@LAPTOP-FGPEUFLH ~  
$ pwd  
/home/hugo morones  
  
hugo morones@LAPTOP-FGPEUFLH ~  
$ ls  
actividad3.c vim  
  
hugo morones@LAPTOP-FGPEUFLH ~  
$ gcc actividad3.c -o actividad3  
  
hugo morones@LAPTOP-FGPEUFLH ~  
$ ./actividad3  
Ingrese un número:  
8  
El factorial de -1 es 0.  
  
hugo morones@LAPTOP-FGPEUFLH ~  
$ ./actividad3  
Ingrese un número:  
5  
El factorial de -1 es 0.  
  
hugo morones@LAPTOP-FGPEUFLH ~  
$ gcc -g actividad3.c -o actividad3  
  
hugo morones@LAPTOP-FGPEUFLH ~  
$ gdb ./actividad3  
GNU gdb (GDB) (Cygwin 8.1.1-1) 8.1.1  
Copyright (C) 2018 Free Software Foundation, Inc.  
License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/gpl.html>  
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This GDB was configured as "x86_64-pc-cygwin".  
Type "show configuration" for configuration details.  
For bug reporting instructions, please see:  
<http://www.gnu.org/software/gdb/bugs/>.  
Find the GDB manual and other documentation resources online at:  
<http://www.gnu.org/software/gdb/documentation/>.  
For help, type "help".  
Type "apropos word" to search for commands related to "word"...  
Reading symbols from ./actividad3...done.  
(gdb) run  
Starting program: /home/hugo morones/actividad3  
[New Thread 11428.0x2210]  
[New Thread 11428.0x51a4]  
Ingrese un número:  
6
```



**DICULPE MAESTRO NO SE POR QUE NO ME DEJA PONER LAS IMÁGENES
SEGUIDAS, AUNQUE LAS PONGO SE PONE ON BLANCO.**


```
hugo morones@LAPTOP-FGPEUFLH ~  
$ pwd  
/home/hugo morones  
  
hugo morones@LAPTOP-FGPEUFLH ~  
$ ls  
actividad3.c vim  
  
hugo morones@LAPTOP-FGPEUFLH ~  
$ gcc actividad3.c -o actividad3  
  
hugo morones@LAPTOP-FGPEUFLH ~  
$ ./actividad3  
Ingrese un número:  
8  
El factorial de -1 es 0.  
  
hugo morones@LAPTOP-FGPEUFLH ~  
$ ./actividad3  
Ingrese un número:  
5  
El factorial de -1 es 0.  
  
hugo morones@LAPTOP-FGPEUFLH ~  
$ gcc -g actividad3.c -o actividad3  
  
hugo morones@LAPTOP-FGPEUFLH ~  
$ gdb ./actividad3  
GNU gdb (GDB) (Cygwin 8.1.1-1) 8.1.1  
Copyright (C) 2018 Free Software Foundation, Inc.  
License GPLv3+: GNU GPL version 3 or later <http://gnu.org/licenses/gpl.html>  
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This GDB was configured as "x86_64-pc-cygwin".  
Type "show configuration" for configuration details.  
For bug reporting instructions, please see:  
<http://www.gnu.org/software/gdb/bugs/>.  
Find the GDB manual and other documentation resources online at:  
<http://www.gnu.org/software/gdb/documentation/>.  
For help, type "help".  
Type "apropos word" to search for commands related to "word"...  
Reading symbols from ./actividad3...done.  
(gdb) run  
Starting program: /home/hugo morones/actividad3  
[New Thread 11428.0x2210]  
[New Thread 11428.0x51a4]  
Ingrese un número:  
6
```



```

8
El factorial de -1 es 0.

hugo morones@LAPTOP-FGPEUFLH ~
$ ./actividad3
Ingrese un número:
5
El factorial de -1 es 0.

hugo morones@LAPTOP-FGPEUFLH ~
$ gcc -g actividad3.c -o actividad3

hugo morones@LAPTOP-FGPEUFLH ~
$ gdb ./actividad3
GNU gdb (GDB) (Cygwin 8.1.1-1) 8.1.1
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Find the GDB manual and other documentation resources online at:
<http://www.gnu.org/software/gdb/documentation/>.
For help, type "help".
Type "apropos word" to search for commands related to "word"...
Reading symbols from ./actividad3...done.
(gdb) run
Starting program: /home/hugo morones/actividad3
[New Thread 11428.0x2210]
[New Thread 11428.0x51a4]
Ingrese un número:
6
El factorial de -1 es 0.
[Thread 11428.0x51a4 exited with code 0]
[Inferior 1 (process 11428) exited normally]
(gdb) list
1      #include <stdio.h>
2
3      int main()
4      {
5          int numero;
6
7          printf("Ingrese un número:\n");
8          scanf("%i",&numero);
9
10         long int resultado = 1;
(gdb)

```



○ Escribe aquí para buscar



```
actividad3.c
4
5 {
6     int numero;
7     printf("Ingrese un número:\n");
8     scanf("%i",&numero);
9
10    long int resultado = 1;
11    while(numero>=0){
12        numero--;
13        resultado *= numero;
14    }
15
16    printf("El factorial de %i es %li.\n", numero, resultado);
17
18    return 0;
19 }
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
```

native Thread 15104.0x1958 In: main
(gdb) start
Temporary breakpoint 1 at 0x10040108d: file actividad3.c, line 7.
Starting program: /home/hugo morones/actividad3
[New Thread 15104.0x1958]
[New Thread 15104.0x4720]

Thread 1 "actividad3" hit Temporary breakpoint 1, main () at actividad3.c:7
(gdb) |

Windows taskbar: Escribe aquí para buscar, [Task View], [Edge], [File Explorer], [Chrome], [Store], [OneDrive], [Word], [PowerPoint], [Gmail]

```
6
4      {      printf("Ingrese un número:\n");
> 5      int numero; &numero);
6
70     printf("Ingrese un número:\n");
8     scanf("%i",&numero);
92     numero--;
10    long int resultado = 1; mero;
11    while(numero>=0){
12        numero--;
13        resultado *= numero; i.\n", numero, resultado);
14    }
15    return 0;
16    printf("El factorial de %i es %li.\n", numero, resultado);
17
18    return 0;
19 }
20
21
22
23
24
25
26
27
28
29
30
31
32
nat33 Thread 16572.0x48b8 In: main
(gdb) start
Temporary breakpoint 1 at 0x10040108d: file actividad3.c, line 7.
Starting program:
[New Thread 16572.0x4008]
[New Thread 16572.0x4b04]

(gdb) n
0x000000018004a816 in _cygwin_exit_return () from /usr/bin/cygwin1.dll
Single stepping until exit from function _cygwin_exit_return,
which has no line number information.
[Thread 16572.0x4404 exited with code 0]
[Thread 16572.0x4b04 exited with code 0]
[Inferior 1 (process 16572) exited normally]
(gdb) n
The program is not being run.
The program is not being run.
(gdb) |
```



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```
E-
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For help, type "help".
Type "apropos word" to search for commands related to "word"...
Reading symbols from actividad3...done.
(gdb)
Rugo: norones@LAPTOP-FGPEUFLH -
$ gdb actividad3
GNU gdb (GDB) (Cygwin 8.1.1-1) 8.1.1
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<http://www.gnu.org/software/gdb/documentation/>.
For help, type "help".
Type "apropos word" to search for commands related to "word"...
Reading symbols from actividad3...done.
(gdb)
Rugo: norones@LAPTOP-FGPEUFLH -
$ gdb actividad3
GNU gdb (GDB) (Cygwin 8.1.1-1) 8.1.1
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<http://www.gnu.org/software/gdb/documentation/>.
For help, type "help".
Type "apropos word" to search for commands related to "word"...
Reading symbols from actividad3...done.
(gdb) break 8
Breakpoint 1 at 0x100401099: file actividad3.c, line 8.
(gdb) run
```

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```
For help, type "help".
Type "apropos word" to search for commands related to "word"...
Reading symbols from actividad3...done.
(gdb)
hugo morones@LAPTOP-FGPEUFLH ~
$ gdb actividad3
GNU gdb (GDB) (Cygwin 8.1.1-1) 8.1.1
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Type "apropos word" to search for commands related to "word"...
Reading symbols from actividad3...done.
(gdb)
hugo morones@LAPTOP-FGPEUFLH ~
$ gdb actividad3
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<http://www.gnu.org/software/gdb/documentation/>.
For help, type "help".
Type "apropos word" to search for commands related to "word"...
Reading symbols from actividad3...done.
(gdb) break 8
Breakpoint 1 at 0x100401099: file actividad3.c, line 8.
(gdb) run
Starting program: /home/hugo morones/actividad3
[New Thread 20640.0x518c]
[New Thread 20640.0x3320]
Ingrese un número:
Thread 1 "actividad3" hit Breakpoint 1, main () at actividad3.c:8
8      scanf("%i",&numero);
(gdb) |
```



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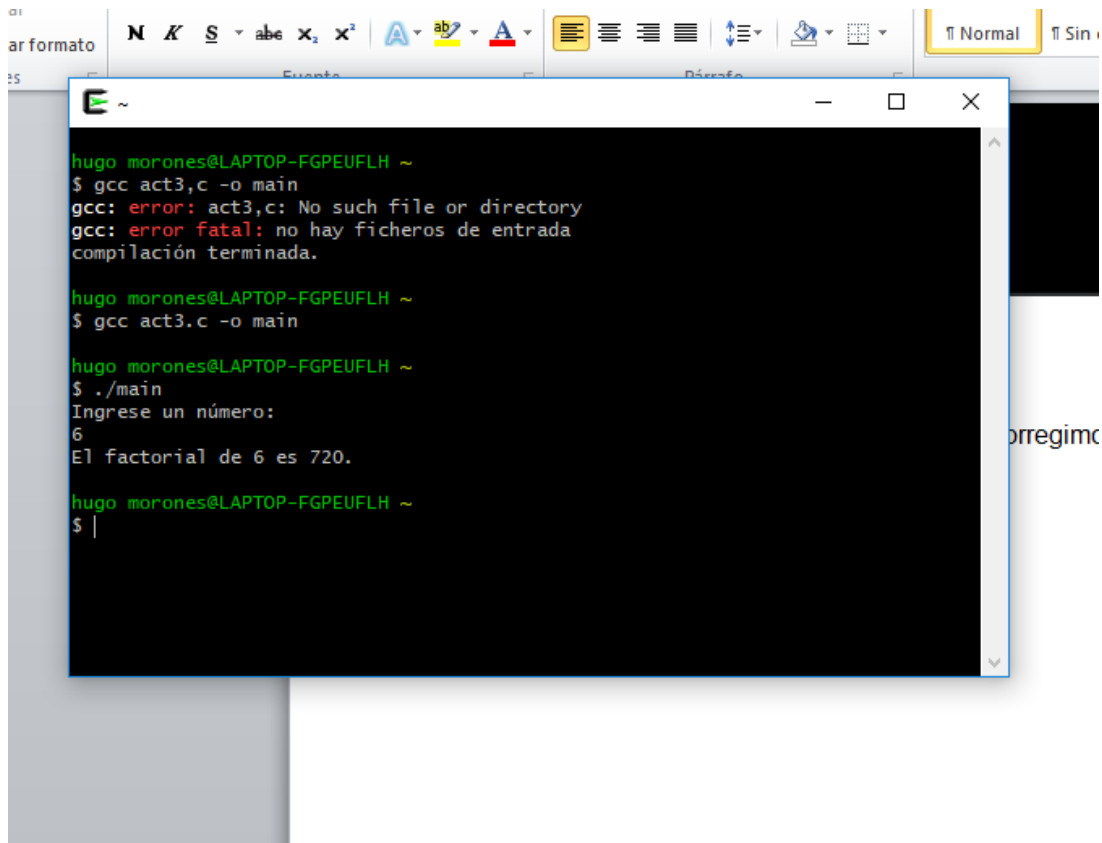


```
~
-actividad3.c
1  #include <stdio.h>
2
3  int main()
4  {
5      int numero;
6
7      printf("Ingrese un número:\n");
8      scanf("%i",&numero);
9
10     long int resultado = 1;
11     while(numero>=0){
12         numero--;
13         resultado *= numero;
14     }
15
16     printf("El factorial de %i es %li.\n", numero, resultado);
17
18     return 0;
19 }
20
21
22
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native Thread 20640.0x518c In: main
(gdb) n
[New Thread 20640.0x2d0c]
[New Thread 20640.0x3518]
(gdb) n
(gdb) p i
No symbol "i" in current context.
(gdb) print lista
No symbol "lista" in current context.
(gdb) display lista
No symbol "lista" in current context.
(gdb) |
```

PROGRAMA CORREGIDO.

De igual manera sucedió con este programa corregimos su sintaxis y corrió.



```
hugo morones@LAPTOP-FGPEUFLH ~
$ gcc act3,c -o main
gcc: error: act3,c: No such file or directory
gcc: error fatal: no hay ficheros de entrada
compilación terminada.

hugo morones@LAPTOP-FGPEUFLH ~
$ gcc act3.c -o main

hugo morones@LAPTOP-FGPEUFLH ~
$ ./main
Ingrese un número:
6
El factorial de 6 es 720.

hugo morones@LAPTOP-FGPEUFLH ~
$ |
```



```
hugo morones@LAPTOP-FGPEUFLH ~  
$ gcc act3.c -o main  
gcc: error: act3.c: No such file or directory  
gcc: error fatal: no hay ficheros de entrada  
compilación terminada.  
  
hugo morones@LAPTOP-FGPEUFLH ~  
$ gcc act3.c -o main  
  
hugo morones@LAPTOP-FGPEUFLH ~  
$ ./main  
Ingrese un número:  
6  
El factorial de 6 es 720.  
  
hugo morones@LAPTOP-FGPEUFLH ~  
$ gcc -g act3.c -o main  
  
hugo morones@LAPTOP-FGPEUFLH ~  
$ gdb ./main  
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<http://www.gnu.org/software/gdb/documentation/>.  
For help, type "help".  
Type "apropos word" to search for commands related to "word"...  
Reading symbols from ./main...done.  
(gdb) run  
Starting program: /home/hugo morones/main  
[New Thread 7000.0x3d5c]  
[New Thread 7000.0x1cb0]  
Ingrese un número:  
5  
El factorial de 5 es 120.  
[Inferior 1 (process 7000) exited normally]  
(gdb)
```

CONCLUSIONES.

Logramos el objetivo con éxito, pudimos ver para que nos sirve gdb y estuvimos interactuando con el para conocerlo más.