[root@Sonder T05]# gcc -E T02\_05.c -o test.i

[root@Sonder T05]# gcc -S test.i -o test.s

[root@Sonder T05]# gcc -c test.s -o test.o

[root@Sonder T05]# gcc test.o -o test

[root@Sonder T05]# ./test

func1(a) = 127

func1(b) = 128

func1(c) = 255

func1(d) = 0

func2(a) = 127

func2(b) = -128

func2(c) = -1

func2(d) = 0

[root@Sonder T05]# objdump -S test>test.txt

[root@Sonder T05]# gcc -g T02\_05.c -o test

[root@Sonder T05]# objdump -S test>test.txt

[root@Sonder T05]# objdump -S test.o>testtest.txt

[root@Sonder T05]# ./test

func1(a) = 127

func1(b) = 128

func1(c) = 255

func1(d) = 0

func2(a) = 127

func2(b) = -128

func2(c) = -1

func2(d) = 0

[root@Sonder T05]# gdb test

GNU gdb (GDB) Red Hat Enterprise Linux (7.2-60.el6\_4.1)

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and "show warranty" for details.

This GDB was configured as "i686-redhat-linux-gnu".

For bug reporting instructions, please see:

<http://www.gnu.org/software/gdb/bugs/>...

Reading symbols from /root/Desktop/Homework/chapter02/T05/test...done.

(gdb) break main

Breakpoint 1 at 0x80483e8: file T02\_05.c, line 15.

(gdb) s

The program is not being run.

(gdb) run

Starting program: /root/Desktop/Homework/chapter02/T05/test

Breakpoint 1, main () at T02\_05.c:15

15 unsigned a = 127;

Missing separate debuginfos, use: debuginfo-install glibc-2.12-1.132.el6.i686

(gdb) s

16 unsigned b = 128;

(gdb) s

17 unsigned c = 255;

(gdb) s

18 unsigned d = 256;

(gdb) s

20 printf("func1(a) = %d\n", func1(a));

(gdb) i r ebp esp

ebp 0xbffff328 0xbffff328

esp 0xbffff300 0xbffff300

(gdb) x/11xw $esp

0xbffff300: 0x003461ec 0x0804822c 0x00348ce0 0x00347ff4

0xbffff310: 0x0000007f 0x00000080 0x000000ff 0x00000100

0xbffff320: 0x08048510 0x00000000 0xbffff3a8

(gdb) s

func1 (word=127) at T02\_05.c:5

5 return (int)((word << 24) >> 24);

(gdb) s

6 }

(gdb) i r eax

eax 0x7f 127

(gdb) s

func1(a) = 127

main () at T02\_05.c:21

21 printf("func1(b) = %d\n", func1(b));

(gdb) s

func1 (word=128) at T02\_05.c:5

5 return (int)((word << 24) >> 24);

(gdb) i r eax

eax 0x80 128

(gdb) s

6 }

(gdb) s

func1(b) = 128

main () at T02\_05.c:22

22 printf("func1(c) = %d\n", func1(c));

(gdb) s

func1 (word=255) at T02\_05.c:5

5 return (int)((word << 24) >> 24);

(gdb) i r eax

eax 0xff 255

(gdb) s

6 }

(gdb) s

func1(c) = 255

main () at T02\_05.c:23

23 printf("func1(d) = %d\n", func1(d));

(gdb) s

func1 (word=256) at T02\_05.c:5

5 return (int)((word << 24) >> 24);

(gdb) i r eax

eax 0x100 256

(gdb) s

6 }

(gdb) i r eax

eax 0x0 0

(gdb) s

func1(d) = 0

main () at T02\_05.c:25

25 printf("func2(a) = %d\n", func2(a));

(gdb) s

func2 (word=127) at T02\_05.c:10

10 return ((int)word << 24) >> 24;

(gdb) s

11 }

(gdb) i r eax

eax 0x7f 127

(gdb) s

func2(a) = 127

main () at T02\_05.c:26

26 printf("func2(b) = %d\n", func2(b));

(gdb) s

func2 (word=128) at T02\_05.c:10

10 return ((int)word << 24) >> 24;

(gdb) i r eax

eax 0x80 128

(gdb) s

11 }

(gdb) i r eax

eax 0xffffff80 -128

(gdb) s

func2(b) = -128

main () at T02\_05.c:27

27 printf("func2(c) = %d\n", func2(c));

(gdb) s

func2 (word=255) at T02\_05.c:10

10 return ((int)word << 24) >> 24;

(gdb) i r eax

eax 0xff 255

(gdb) s

11 }

(gdb) i r eax

eax 0xffffffff -1

(gdb) s

func2(c) = -1

main () at T02\_05.c:28

28 printf("func2(d) = %d\n", func2(d));

(gdb) s

func2 (word=256) at T02\_05.c:10

10 return ((int)word << 24) >> 24;

(gdb) i r eax

eax 0x100 256

(gdb) s

11 }

(gdb) i r eax

eax 0x0 0

(gdb) 



