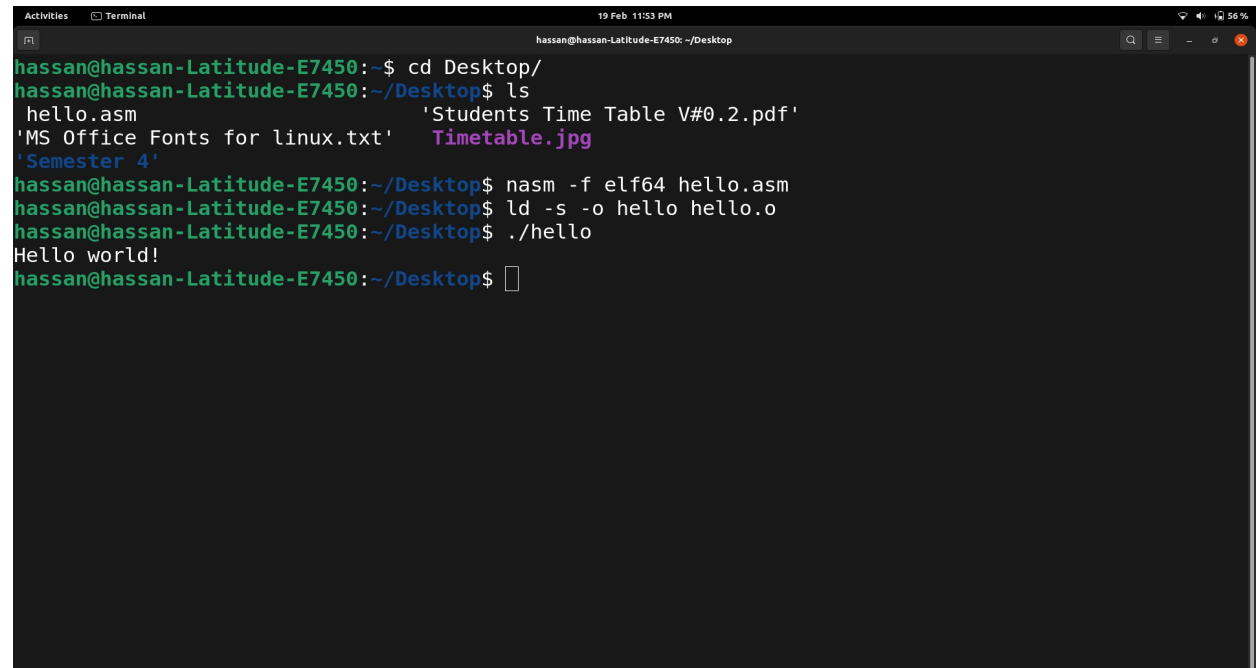


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Assignment Solution:



```
hassan@hassan-Latitude-E7450:~$ cd Desktop/  
hassan@hassan-Latitude-E7450:~/Desktop$ ls  
hello.asm      'Students Time Table V#0.2.pdf'  
'MS Office Fonts for linux.txt'  Timetable.jpg  
'Semester 4'  
hassan@hassan-Latitude-E7450:~/Desktop$ nasm -f elf64 hello.asm  
hassan@hassan-Latitude-E7450:~/Desktop$ ld -s -o hello hello.o  
hassan@hassan-Latitude-E7450:~/Desktop$ ./hello  
Hello world!  
hassan@hassan-Latitude-E7450:~/Desktop$
```

int80h:

int 80h is the assembly language op code for interrupt 80h. It allows application programmers to obtain system services from the Linux kernel. The Linux or monolithic kernel service handle such things as the opening and closing of files, accessing various devices, reading from and writing to the terminal, starting new processes, etc. Without these services, every single program would have to do its own. The programmer would spend so much time interfacing with the computer hardware.

How int80h works ?

Well we know that int80h is the system call to the kernel. The kernel does stuff according to the values that were in registers.

mov eax , 4 (will get the kernel to call its sys_write kernel function)

mov ebx , 1 (1 = stdout, which is normally connected to the terminal.)