2) 软硬件层次和编译过程

2019年4月10日 23:09

Between Your Program and Hardware



Written in high-level language (HLL)

System software

- Compiler: translates HLL code to machine code
- Operating System: service code
 - Handling input/output
 - Managing memory and storage
 - Scheduling tasks & sharing resources

Hardware

Processor, memory, I/O controllers

Applications software

Applications software

Hardware

应用软件层次:高级语言编写应用 系统软件层次:编译器 DBMS 操作系统

硬件: 处理器 (CPU) 存储器 输入输出装置等

编译原理:

Starting a C Program 从C语言 (高级语言) 出发.c --->编译器 C Program X.C 汇编语言文件 .s .asm Compiler ---->汇编器 Assembly language program 机器语言文件 .o library机器语言文件.a .so Assembler x.a, x.so ----->Linker 合并 Object: machine language module Object: library routine (machine language) Linker 可执行文件 .out .exe Executable: machine language program ---->loader Loader 储存到memory中 Memory