

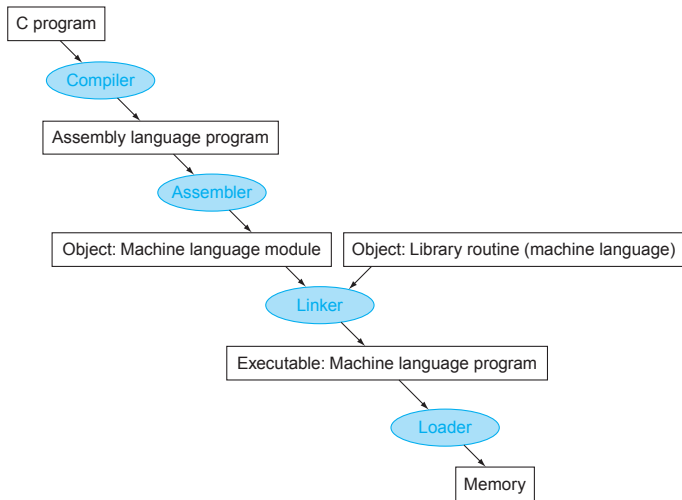
CSE 305: Computer Architecture

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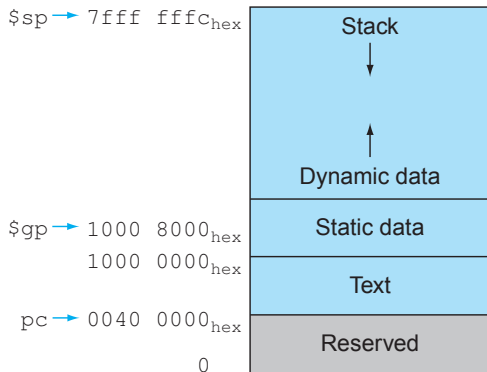
Department of Computer Science and Engineering
Bangladesh University of Engineering and Technology.

October 14, 2015

C Code Translation & Startup

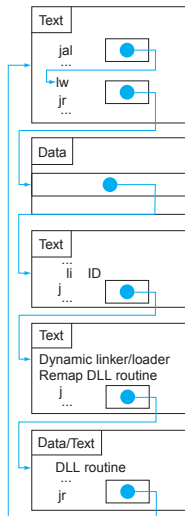


MIPS Memory Allocation for Program & Data

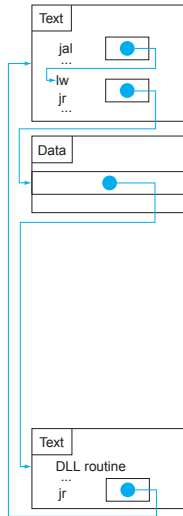


Dynamic Linking

DLLs

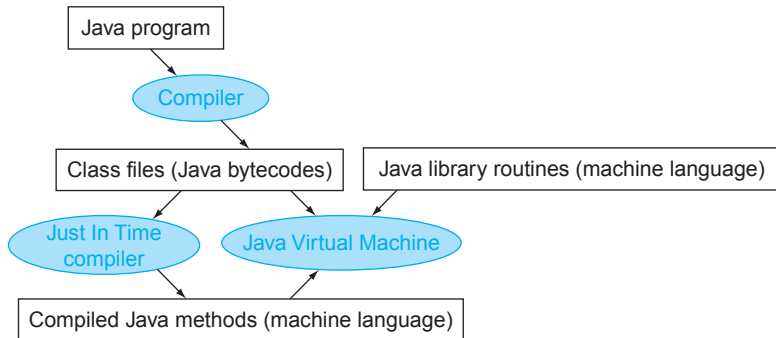


(a) First call to DLL routine



(b) Subsequent calls to DLL routine

Starting Java Applications



Fallacies

- ▶ Powerful instruction ! = higher performance
- ▶ Use Assembly Code ! = higher performance
- ▶ Backward compatibility ! = instruction set doesn't change

Concluding Remarks

1. Simplicity favors regularity
2. Smaller is faster
3. With Good design comes good compromises
4. Make the common case fast

Reference

- ▶ Computer Organization and Design: The Hardware/Software Interface, *Chapter 2, 2.11, 2.12, 2.19, 2.20*
 - ▶ David A. Patterson
 - ▶ John L. Hennessy

Class Test 2

Syllabus: Chapter 2

A photograph of a group of men in dark suits and ties, gathered around a table. They are all smiling and laughing, holding glasses of wine. The scene appears to be a formal or semi-formal social event. The text is overlaid on the image in a large, white, bold font with a black outline.

AND THEN I SAID

**THE TEST WILL BE JUST LIKE WHAT WE
COVERED IN CLASS**