

the essentials of

Computer Organization and Architecture

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Chapter 9

Alternative Architectures

Chapter 9

EXERCISES



- 1. Why do RISC machines operate on registers?**

- 12. Flynn's taxonomy consists of four primary models of computation. Briefly describe each of the categories and give an example of a high-level problem for which each of these models might be used.**

Chapter9

EXERCISES



33. Indicate whether each of the following applies to CISC or RISC by placing either a C (for CISC) or an R (for RISC) in the blank.

_____ 1. Simple instructions averaging one clock cycle to execute.

_____ 2. Single register set.

_____ 3. Complexity is in the compiler.

_____ 4. Highly pipelined.

_____ 5. Any instruction can reference memory.

Chapter 9

EXERCISES



_____ 6. Instructions are interpreted by the microprogram.

_____ 7. Fixed length, easily decoded instruction format.

_____ 8. Highly specialized, infrequently used instructions.

_____ 9. Use of overlapping register windows.

_____ 10. Relatively few addressing modes.

