

## Advanced Computer Architecture

---

### 1. Remembering:

- Define elements of modern computers
- Recall the performance metrics used in evaluating computer architecture
- List the different types of parallel computer structures

### 2. Understanding:

- Explain the switch from uniprocessors to multiprocessors
- Describe the architectural classification of parallel processing systems
- Summarize the principles of pipelining and vector processing

### 3. Applying:

- Analyze the design principles of pipelined processors
- Evaluate the requirements for vector processing
- Implement parallel algorithms for array processors

### 4. Analyzing:

- Compare and contrast different SIMD array processors
- Examine the interconnection networks used in SIMD computers
- Evaluate the parallel memory organizations in multiprocessor architecture

### 5. Evaluating:

- Critique the functional structures of multiprocessor systems
- Assess the effectiveness of multistage interconnection networks
- Evaluate cache memories and management techniques

### 6. Creating:

- Design hierarchical memory structures for a specific computing system
- Develop an interconnection network for a parallel processing application
- Propose improvements to the I/O sub-systems for enhanced performance

Select Language ▼

Powered by [Google Translate](#)

