



Challenges and Solutions			Kelinde Institute of Technology	
 Problem Large gap between CPU, memory and disk access times Lack of rapid performance improvements in disk technology relates to the mechanical nature of the disk 				
Solutions:	Processor Cache memory Main Memory Magnetic disk	Access time 1-10 ns 10-100 ns 100-1000 ns 5-50 ms		
 Decouple CPU performance and disk performance: caching Increase storage device parallelism: disk arrays (RAID) 				
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