Distributed computing is a computer system architecture where multiple computers or computing resources are interconnected and work together to solve a computational problem or handle a large workload. In a distributed computing environment, the computational task is divided into smaller sub-tasks, and these sub-tasks are distributed across multiple computers or nodes in the system. These nodes work in parallel, simultaneously processing their assigned sub-tasks, and the final result is obtained by combining the outputs from all the nodes.

The main objectives of distributed computing are to:

Increase computational power: By leveraging the combined processing capabilities of multiple computers, distributed computing systems can tackle complex problems or handle massive amounts of data that would be difficult or impossible for a single computer to handle easily.

Achieve parallelism: Dividing a large task into smaller sub-tasks and executing them concurrently on multiple nodes can significantly reduce the overall execution time, leading to improved performance and faster results.
Improve reliability and fault tolerance: In a distributed system, if one node fails, the remaining nodes can continue to operate, and the task can be reassigned to other available nodes, ensuring the overall system remains functional.

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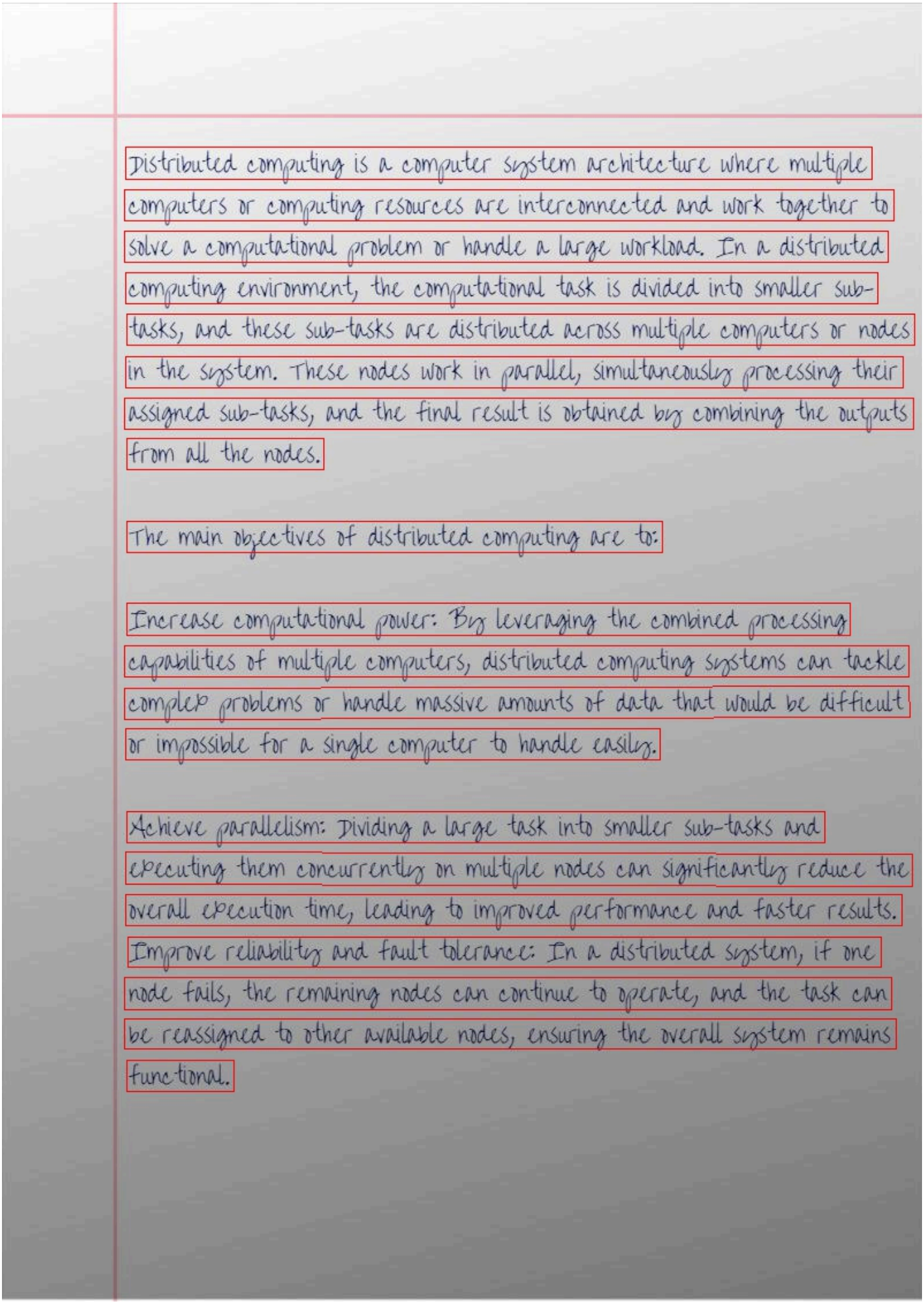

Segmented Image

Extracted Text: Distributed computing is a computer system architecture where multiple computers or computing resources are interconnected and work together to solve a computational problem or handle a large workload. In a distributed computing environment, the computational task is divided into smaller sub- tasks, and these sub-tasks are distributed across multiple computers or nodes in the system. These notes work in parallel, simultaneously processing their assigned sub-tasks, and the final result is obtained by combining the out-put from all the nodes. The main objectives of distributed computing are to. Increase computational power : By leveraging the combined processing capabilities of multiple computers, distributed computing systems can tackle complex problems or handle massive amounts of data that would be difficult or impossible for a single computer to handle easily. Achieve parallelism. Dividing a large task into smaller sub-tasks and executing them concurrently on multiple nodes can significantly reduce the overall execution time, leading to improved performance and faster results. improve reliability and fault tolerances. In a distributed system, if one node fails, the remaining nodes can continue to operate, and the task can be reassigned to other available nodes, ensuring the overall system remains functional. nodes, ensuring the overall system remains functional The fifa. championship. has. awarded. been. four. 1942 (1946. except in every. years. w it. not held due. when to WWII. war.

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Extract Segmentation and Text

Enter the question

What is distributed Computing ?

Enter the reference answer

Distributed computing is a setup where many computers or resources are linked together to work on a big task or deal with a heavy workload. In this setup, the big task is broken into smaller parts, and these parts are spread out across multiple computers or nodes in the system. These nodes work together at the same time, each handling its own part of the task. The final result comes from

Question saved to: temporary/question.txt

Reference answer saved to: temporary/reference.txt

Grade

GRADE : "4." FEEDBACK: "The candidate's answer is mostly correct, as it accurately describes the concept of distributed computing, including the division of tasks into sub-tasks, parallel processing, and the goal of increased computational power. However, the answer could have provided more specific examples of how distributed computing is used in real-world applications to enhance its overall clarity."