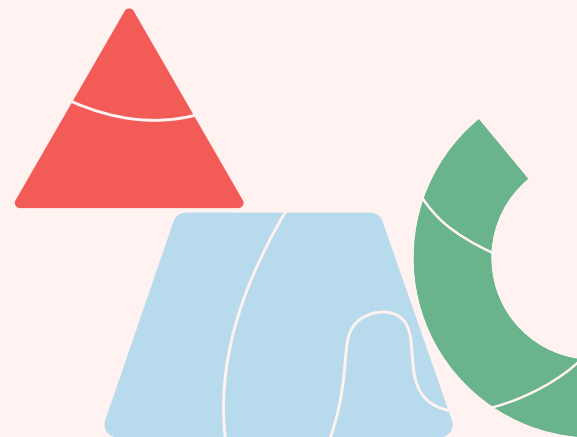
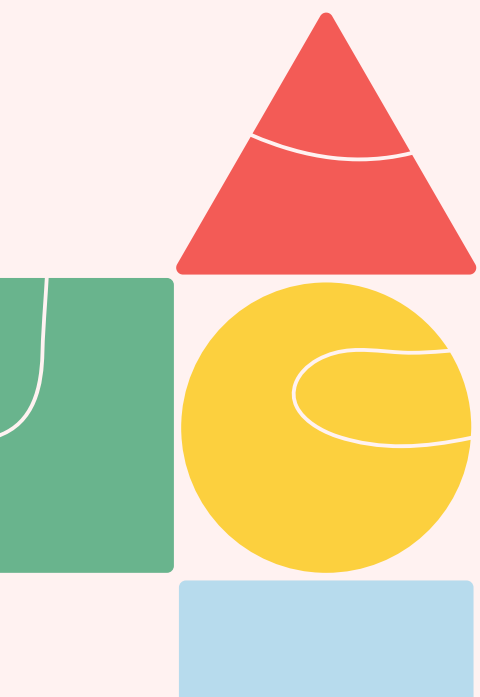


WATER JUG PROBLEM USING JAVA

Presented by :
Ayan Ghosh
Souradeep Dutta
Sourajit Ghosh



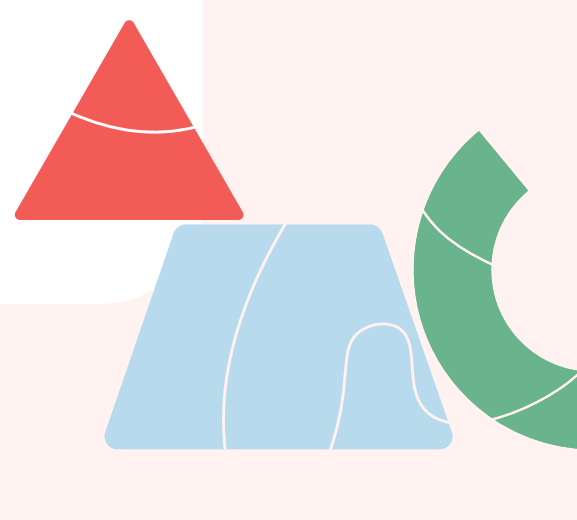
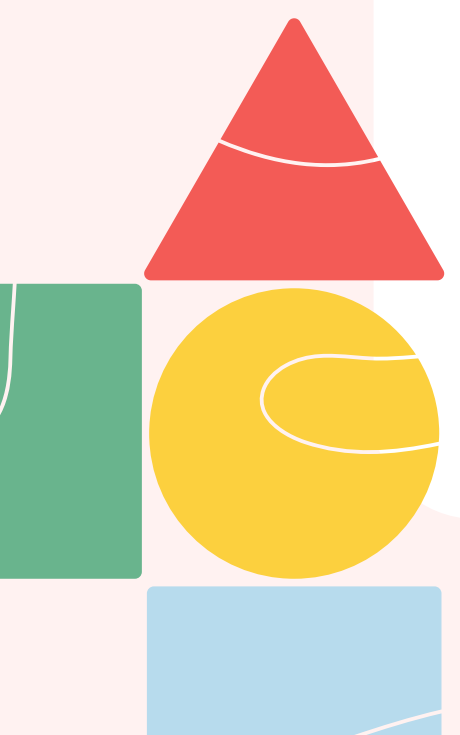
Content

- Introduction
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- Conclusion



Introduction

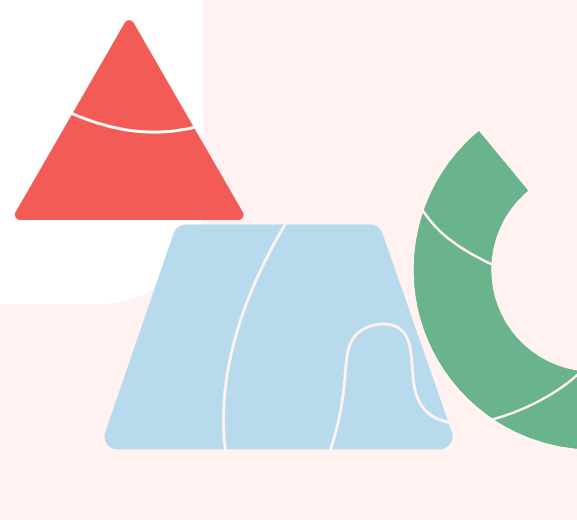
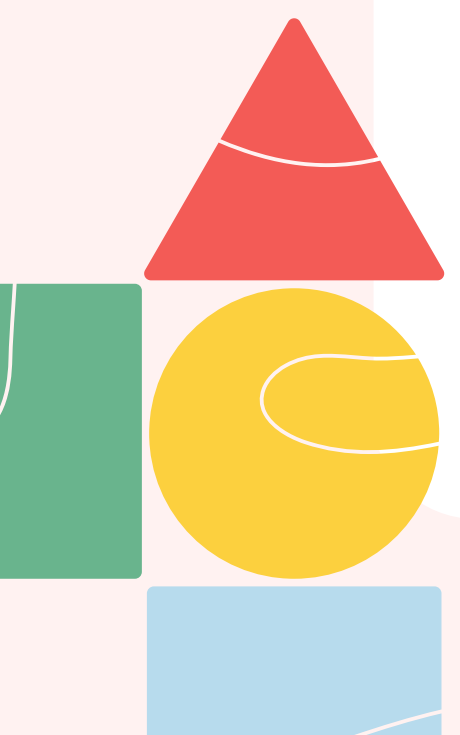
The purpose of documenting the Water Jug Problem is to create a comprehensive and structured resource that elucidates the intricacies of this classic mathematical and algorithmic challenge. By clearly defining the parameters of the problem, including jug capacities and the target volume to be measured, the document aims to establish a foundational understanding for readers.





Project Details

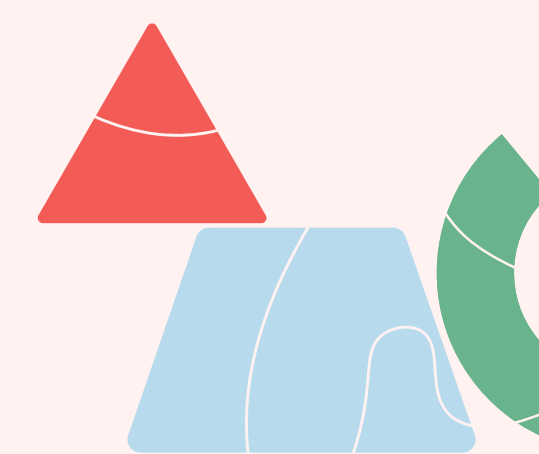
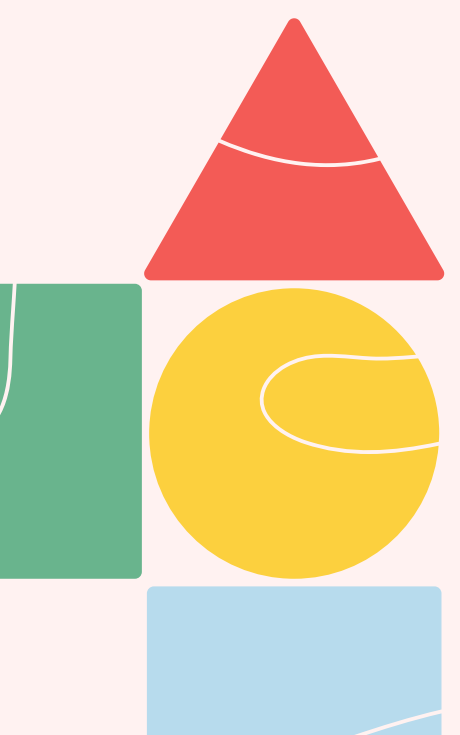
The project aims to generate random numbers through the concatenation of output values from the classic Water Jug Problem. The Water Jug Problem involves finding the minimum number of steps required to measure a certain quantity using two jugs of different capacities. Leveraging this problem for random number generation adds an interesting twist to the conventional application. It is done by using swing interface.





Result

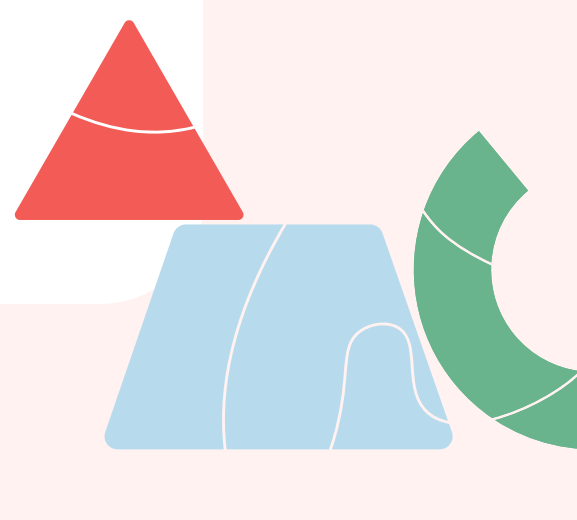
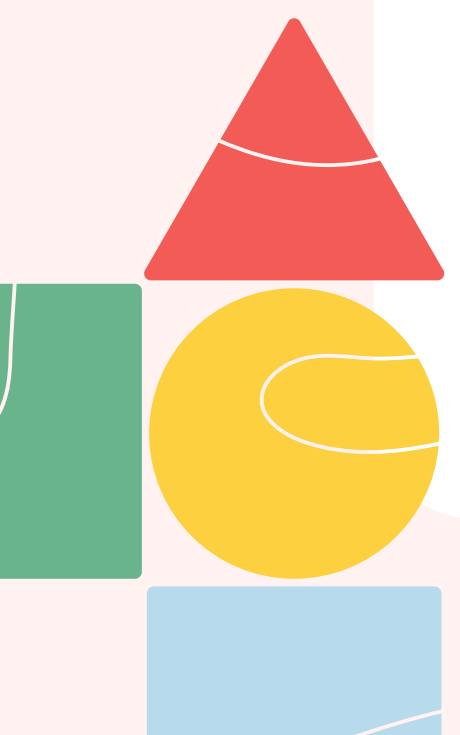
The results of addressing the Water Jug Problem involve the successful application of various algorithms to determine a sequence of actions that lead to the precise measurement of a specified target volume using given jug capacities. Algorithms yield specific step-by-step solutions, showcasing their efficacy in tackling the problem. Optimization techniques, such as heuristics or pruning strategies, contribute to improved efficiency, and the computational complexity analysis sheds light on the scalability of the algorithms. The exploration of real-world applications or analogies offers insights into the practical implications of the Water Jug Problem principles in areas such as resource management or logistics. Educational discussions center on the effectiveness of the problem as a pedagogical tool, examining how it aids in conveying algorithmic concepts.





Conclusion

The project not only successfully addressed the Water Jug Problem through algorithmic solutions but also contributed to a deeper understanding of optimization techniques, computational complexity, and potential real-world applications. The findings are situated within the broader context of existing literature, providing valuable insights into the diverse aspects of the Water Jug Problem and its significance in algorithmic problem-solving.





*Thank
you!*

