



**School of Science and Technology**  
**B.Sc. in Computer Science and Engineering**

**Lab Report : 01**

**Designing a Flowchart of the General Problem Solution Approach**

Submitted By	Submitted To
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## **Objective:**

The objective of this lab report is to design a flowchart illustrating the "General Problem Solution Approach" using EdrawMax or Equivalent software. This flowchart will demonstrate the step-by-step process of addressing and solving a problem efficiently.

## **Theory:**

**Start:** This initial step marks the beginning of the problem-solving process. It involves recognizing that a problem exists and initiating the problem-solving procedure.

**Identify the Problem:** In this step, the problem is clearly defined and identified. This involves understanding the nature of the problem, its scope, and its potential impact.

**Gather the Data:** Once the problem is identified, relevant data and information are gathered. This step is crucial for understanding the underlying causes of the problem and formulating an effective solution.

**Analyze the Data:** The gathered data is then analyzed to identify patterns, trends, and potential solutions. This step involves using analytical tools and techniques to gain insights into the problem and its underlying factors.

**Develop a Solution:** Based on the analysis of the data, potential solutions are devised. This step involves brainstorming, evaluating various options, and selecting the most viable solution to address the problem.

**Simulation:** Before implementing the solution, it is often beneficial to simulate its effects. Simulation allows for testing the proposed solution in a controlled environment to assess its feasibility and potential outcomes.

**Is it the Best Solution?:** After simulation, the selected solution is evaluated to determine if it is the best option available. This involves considering factors such as effectiveness, efficiency, and feasibility.

**Implementation:** Once the best solution is identified, it is implemented in practice. This step involves putting the solution into action and monitoring its implementation process.

**End:** The problem-solving process concludes with the implementation of the solution. At this stage, the effectiveness of the solution is assessed, and any necessary adjustments or follow-up actions are made.

**Required Software:**

For designing the flowchart of the General Problem Solution Approach, EdrawMax or any equivalent software capable of creating flowcharts can be used.

**Procedures:**

Open EdrawMax or equivalent software.

Select the option to create a new flowchart.

Begin by adding the "Start" symbol to represent the starting point of the problem-solving process.

Proceed to add symbols representing each step of the General Problem Solution Approach, including "Identify the Problem," "Gather the Data," "Analyze the Data," "Develop a Solution," "Simulation," "Is it the Best Solution?," "Implementation," and "End."

Connect the symbols in a logical sequence using arrows to represent the flow of the problem-solving process.

Label each symbol appropriately to denote the corresponding step of the process.

Review and refine the flowchart to ensure clarity and coherence.

Save the flowchart once it accurately represents the General Problem Solution Approach.

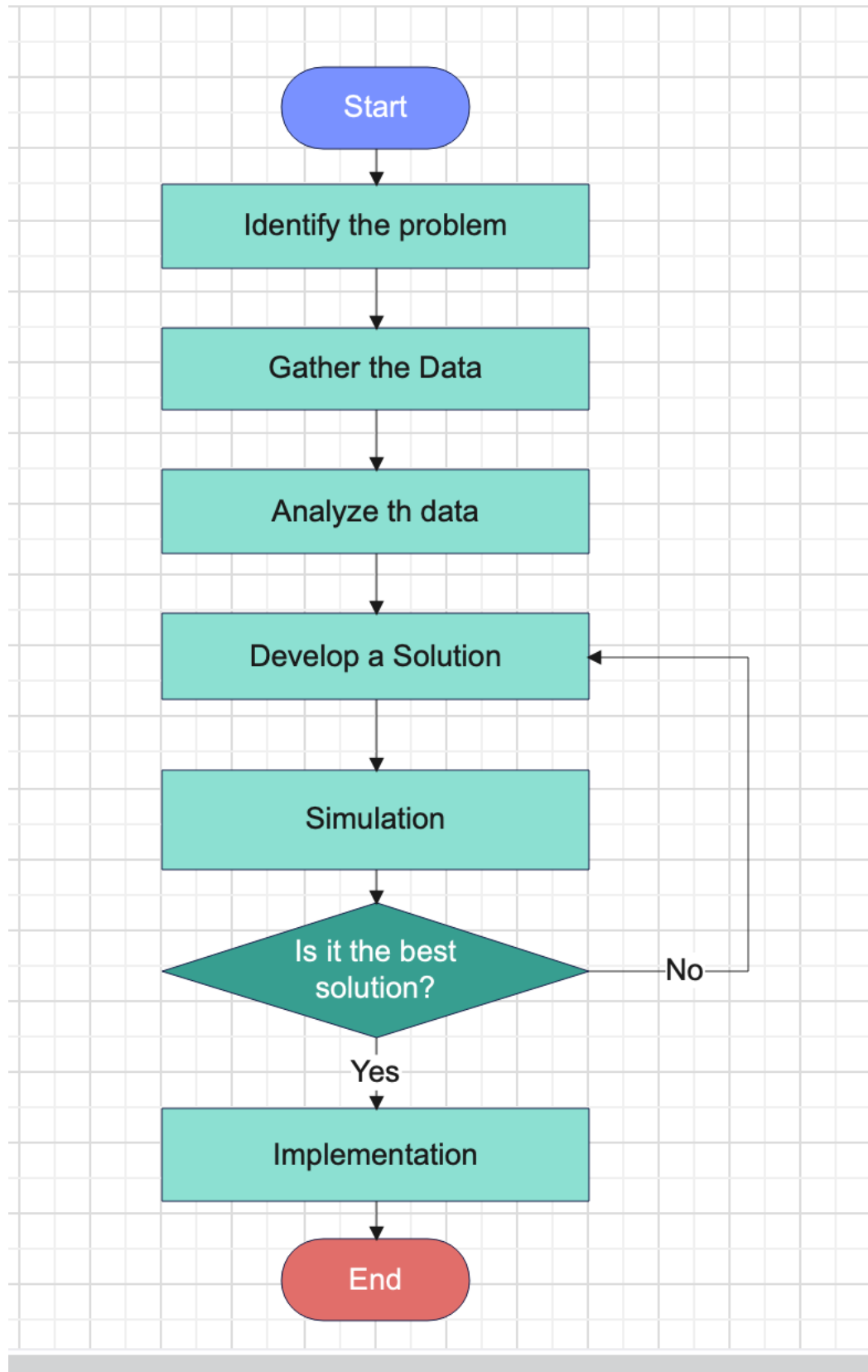


Figure: Flowchart of the General Problem Solution Approach

**Conclusion:**

In conclusion, designing a flowchart of the General Problem Solution Approach provides a structured framework for effectively addressing and solving problems. By following the defined steps, individuals and organizations can streamline their problem-solving process, leading to more efficient and successful outcomes. Utilizing software such as EdrawMax facilitates the visualization and documentation of the problem-solving process, enabling clear communication and collaboration among stakeholders. Overall, the flowchart serves as a valuable tool for guiding problem-solving efforts and driving continuous improvement.