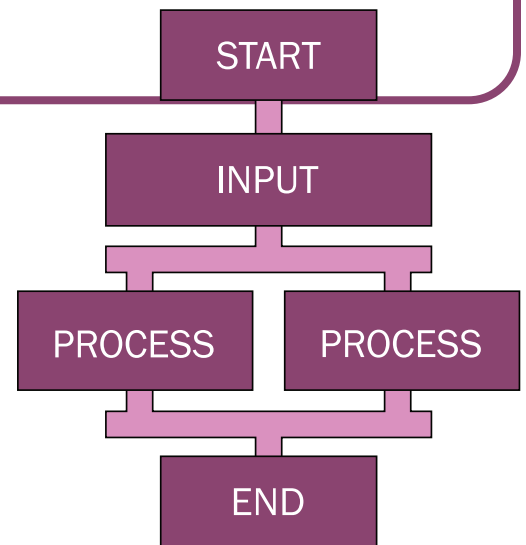


**CONCEPT** A flowchart is a visual representation of a step-by-step problem-solving schema. The flowchart consists of different geometric shapes known as symbols and these symbols represent a single step in a process.



## BACKGROUND

In 1921, two industrial engineers (better known as Frank and Lillian Gilbreth) invented what is today referred to as a flowchart. They called it “The Flow Process Chart” and it was introduced to American Society of Mechanical Engineering (ASME) with a single purpose in mind: to educate individuals on how to visually document a business process.

In the 1940’s, two mathematicians, Herman Goldstine and John von Neumann, introduced the world to a flowchart used for computer programming.

Today, flowchart diagramming is a very important part of software development and database engineering. There are online software products such as Alteryx, that takes flowcharts to another level: users are now able to make changes to their software by a simple execution of a flowchart. Different softwares offer fully functional flowcharts, so that they are not only used for conveying a visual message about a process or two, but they also have the capability to create, alter, update, delete, blend, mine, cleanse, even output reports about data.

## REAL WORLD CONNECTIONS

In the Computer Science field, flowchart diagrams are often used for visualizing algorithmic solutions. In manufacturing operations, flowcharts are used for depicting how a product moves along the production line. A giant corporation such as Amazon displays an order tracking flowchart after each order is placed, enabling customers to visually track their orders.