# CREATING FLOWCHARTS (P.209)

#### Pictorial representation of steps, sequence and relationship of operations in a process.

Flow charts use special shapes to represent different types of actions or steps in a process. Lines and arrows show the sequence of the steps, and the relationships among them. These are known as flow chart symbols.

#### **Common Flowchart Symbols**

- Rectangle Shape Represents a process
- Oval or Pill Shape Represents the start or end
- Diamond Shape Represents a decision
- Parallelogram Represents input/output

#### Each shape has a meaning

Symbol	Name	Function	
	Start/end	An oval represents a start or end point	Terminator/Terminal
>	Arrows	A line is a connector that shows relationships between the representative shapes	Director of flow
	Input/Output	A parallelogram represents input or output	Input/Output (I/O)
	Process	A rectangle represents a process	Most common symbol
	Decision	A diamond indicates a decision	Question or branch in the process - Yes/No Go/Don't Go

# Flowchart can have only one start and one stop symbol

General flow of processes is top to bottom or left to right



#### Start/End Symbol

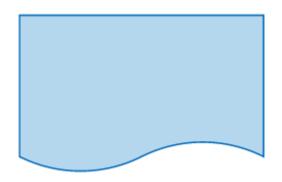
The TERMINAL OR TERMINATOR Symbol marks the starting or ending point of the process. It usually contains the word "Start" or "End."



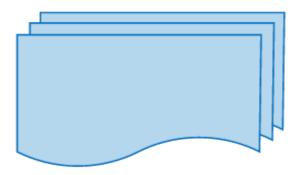
### Action or Process Symbol

A box can represent a single step

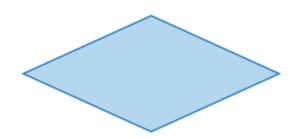
(e.g. "add two cups of flour"), or an entire sub-process ("make bread") within a larger process.



**Document Symbol** Represents a document introduced into or created by the process. A printed document or report.



*Multiple Documents Symbol* Represents multiple documents in the process

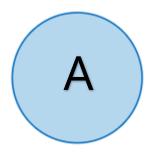


#### **Decision Symbol**

A decision or branching point. Shows a point where a decision is made that leads to a different processing step. Indicates a question or branch in the process flow. Used when there are two options (e.g, YES/NO)



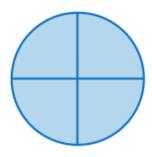
DATA Input/Output Symbol (I/O shape) Represents material or information entering or leaving the process. (E.g. as customer order (input) or a product (output))



#### **Connector Symbol**

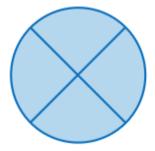
Shows a jump from one point in the process flow to another. Labelled with capital letters.

Indicates that the flow continues where a matching symbol (containing the same letter) has been placed.



### OR Symbol

Shows where a process diverges. Indicates that the process flow continues in more than two branches.



*Summing Junction Symbol* Shows where multiple branches unite into a single process



Flow line

Direction of Flow

## Shows the direction and order of the process steps



# Merge Symbol

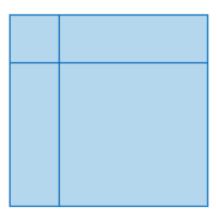
Indicates a step where two or more sub-lists or sub-processes become one.



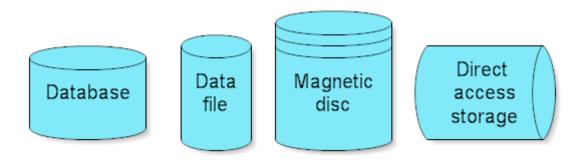
*Delay Symbol* Indicates a delay in the process.

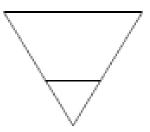


**Data Storage or Stored Data Symbol** Indicates a step where data gets stored.



*Internal Storage Symbol* Indicates that information was stored in memory





The shape represents storage offline