Flowchart 101

These are the basic symbols and functions that are used in constructing a flowchart.

Symbol	Name	Function
(oval)	Start/end	An oval represents a start or end point.
(arrow)	Arrows	A line is a connector that shows relationships between the representative shapes.
(parallelogram)	Input/Output	A parallelogram represents input or ouptut.
(rectangle)	Process	A rectangle represents a process.
(diamond)	Decision	A diamond indicates a decision.

The 3 types of flowcharts that will be discussed in this week's materials are:

1. Sequential Flowchart
2. Conditional Flowchart
3. Iterative Flowchart

1. Sequential Flowchart

Sequential flowchart gives us the orderly/sequential procedure of a process.

```
        start
          │
          ▼
  input num1, num2
          │
          ▼
  sum=num1+num2
          │
          ▼
      print sum
          │
          ▼
         end
```
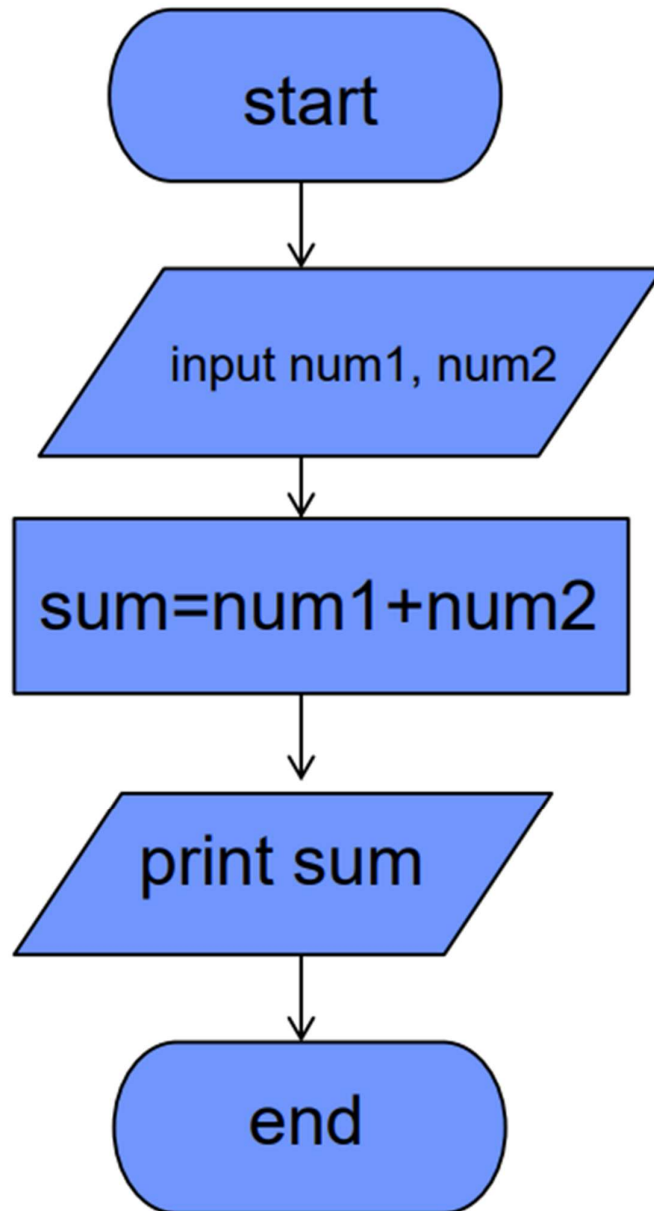
2. <u>Conditional Flowchart</u>

A conditional flowchart is used when a condition is imposed on a problem. The condition will either be true or false. The course of the problem depends on the answer to the condition.
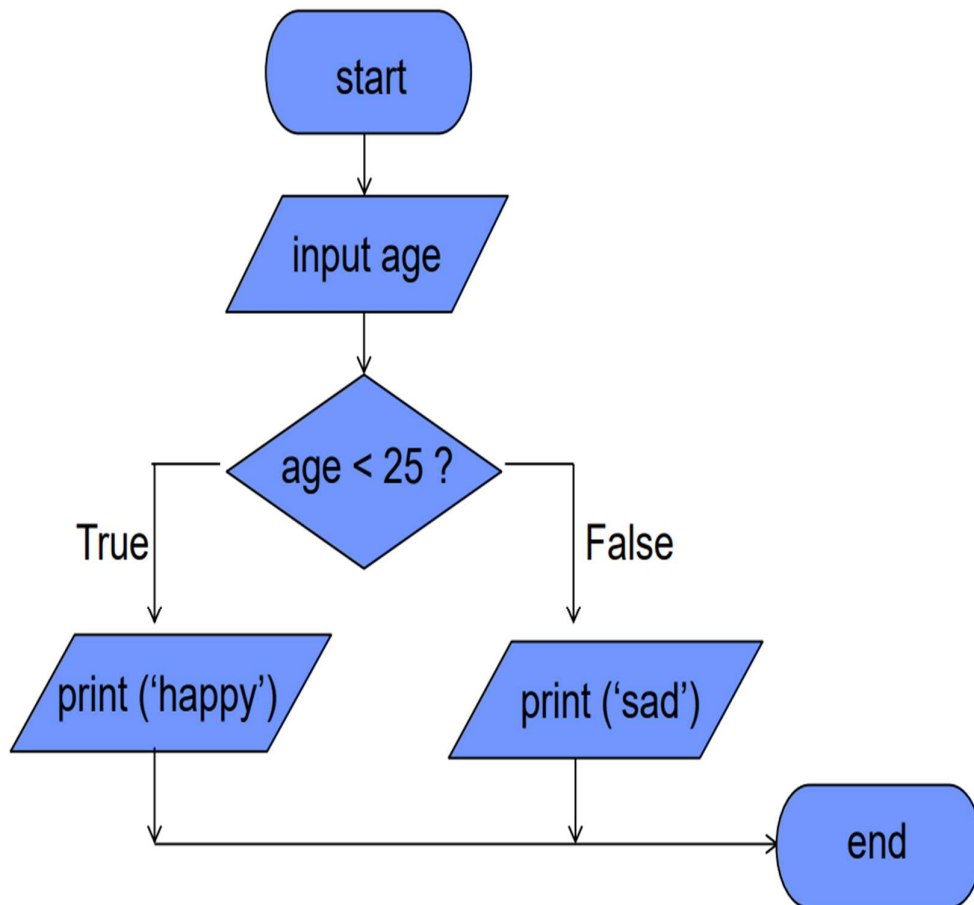
3. Iterative Flowchart

An iterative flowchart is where a step needs to be repeated in a process to satisfy the problem.

```
            ┌──────────┐
            │  start   │
            └────┬─────┘
                 │
                 ▼
            ┌──────────┐
            │ count=0  │
            └────┬─────┘          True
                 ▼◄───────────────────────┐
          ╱──────────────╲                │
         ╱  input number  ╲               │
         ╲                ╱                │
          ╲──────────────╱                │
                 │                         │
                 ▼                         │
          ╱──────────────╲                │
         ╱  print number  ╲               │
         ╲                ╱                │
          ╲──────────────╱                │
                 │                         │
                 ▼                         │
    ┌─────────────────┐      ◇─────────────┘     False    ┌──────────┐
    │ count=count+1   │─────►│ count < 20 ? │───────────►│   end    │
    └─────────────────┘      ◇──────────────         └──────────┘
```