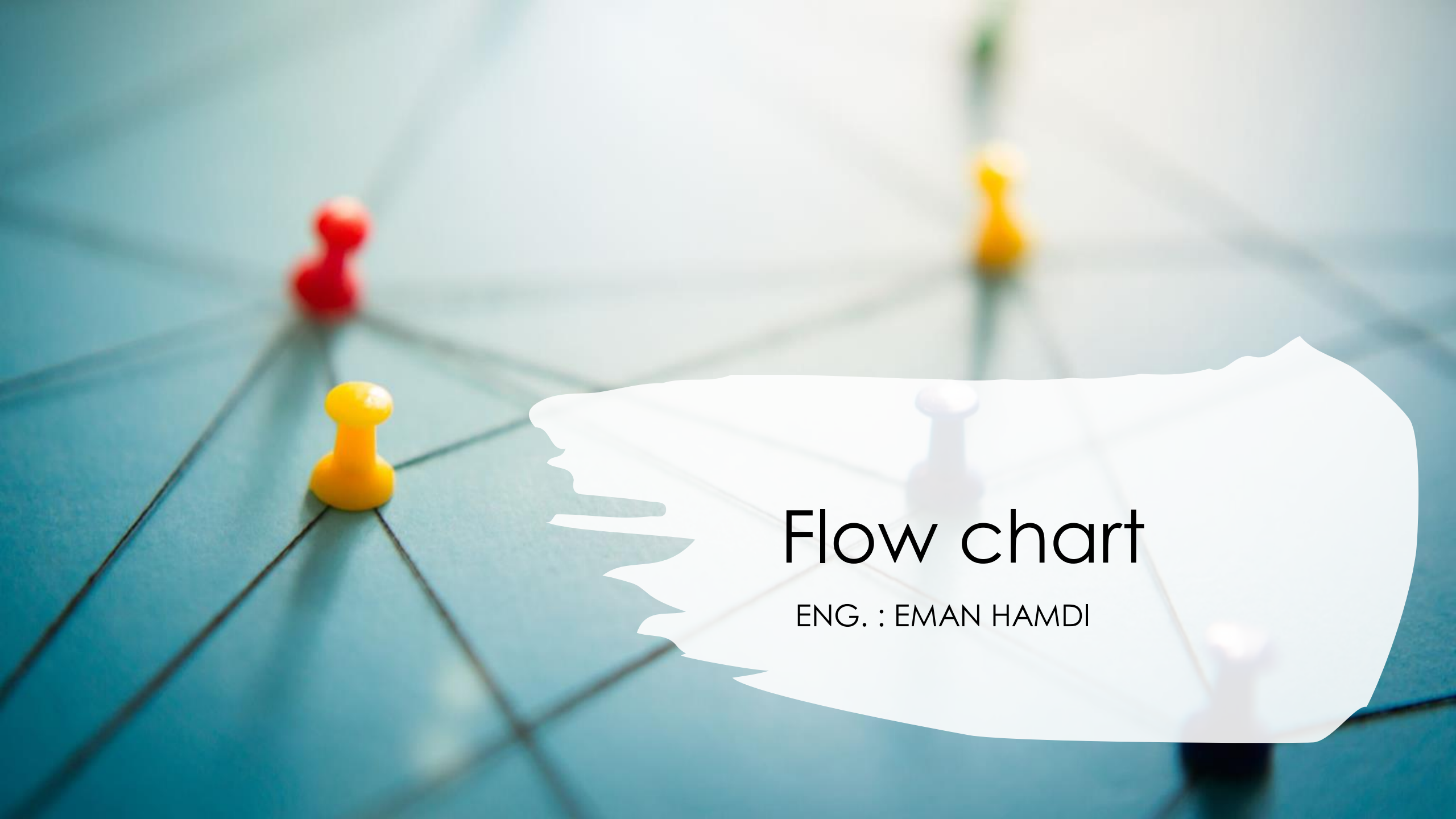




Flow chart

ENG. : EMAN HAMDI

Flow Chart component

- A computer program is a **set of instructions that the computer can understand** which it will obey sequentially one after the other.
- A program must be planned and written down as a **set of steps to follow**.
- One method is using visual tools such **as Flowcharts**.

Flow Chart component

- Flowchart Symbols

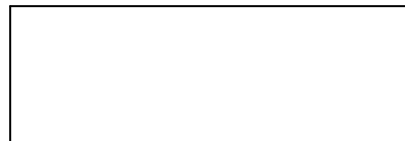
a. **Start** and **end** symbols, represents start and end of a process



b. **Arrows**, showing what's called "**flow of control**". An arrow coming from one symbol and ending at another symbol represents that control passes to the symbol the arrow points to.



c. **Processing**, represented as rectangles. Examples: "Add 1 to X"; "replace identified part"; "save changes" or similar.



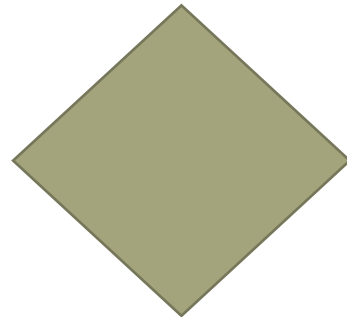
Flow Chart component

- Flowchart Symbols

d. **Input/output**, represented as a parallelogram. Examples: Get X from the user; display X.



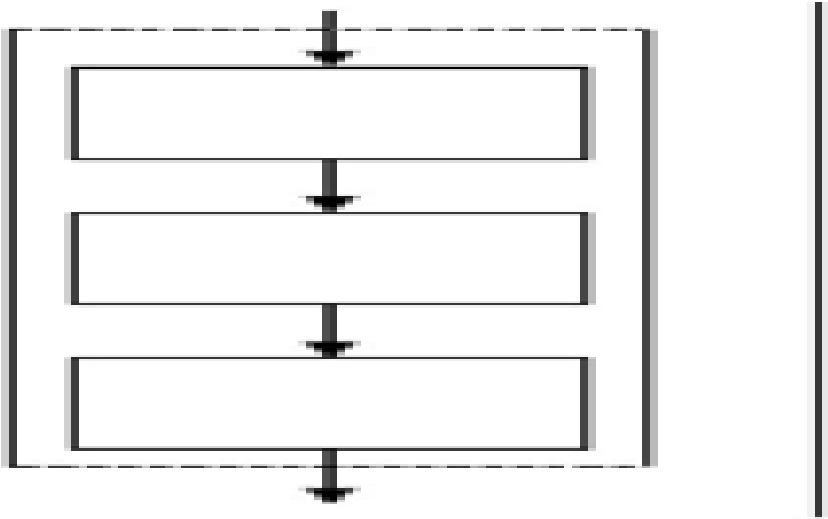
e. **Conditional** (or **decision**), represented as a diamond. These typically contain a Yes/No question or True/False test. This symbol is unique in that it has two arrows coming out of it, usually from the bottom point and right point, one corresponding to Yes or True, and one corresponding to No or False. The arrows should always be labeled. More than two arrows can be used.



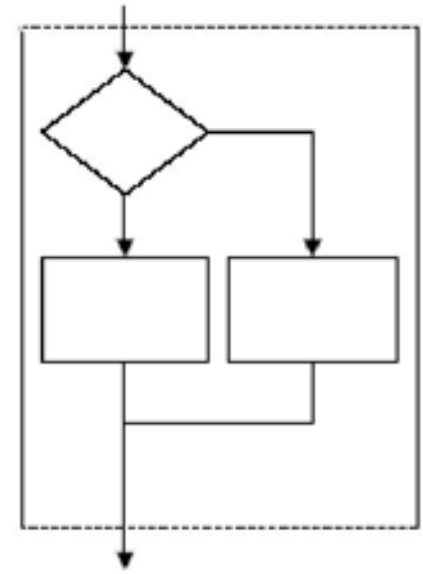
Flow Chart component

Introduce the different structures in flowcharts

a. Sequence Structure



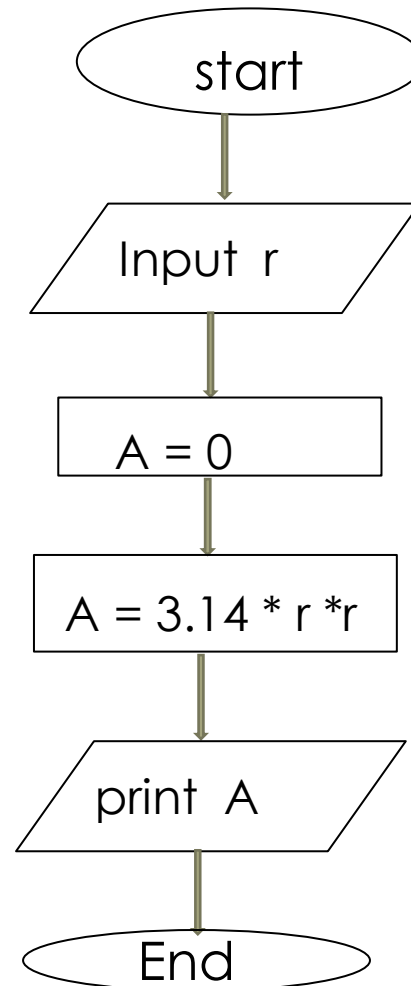
b. If- then-else structure



Flow Chart

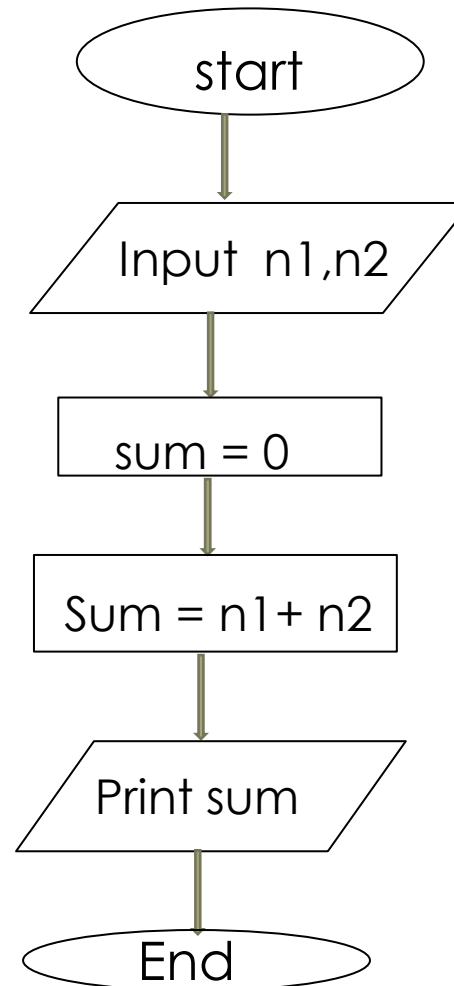
a. Sequence Structure

Read radius (R) and calculate circle area



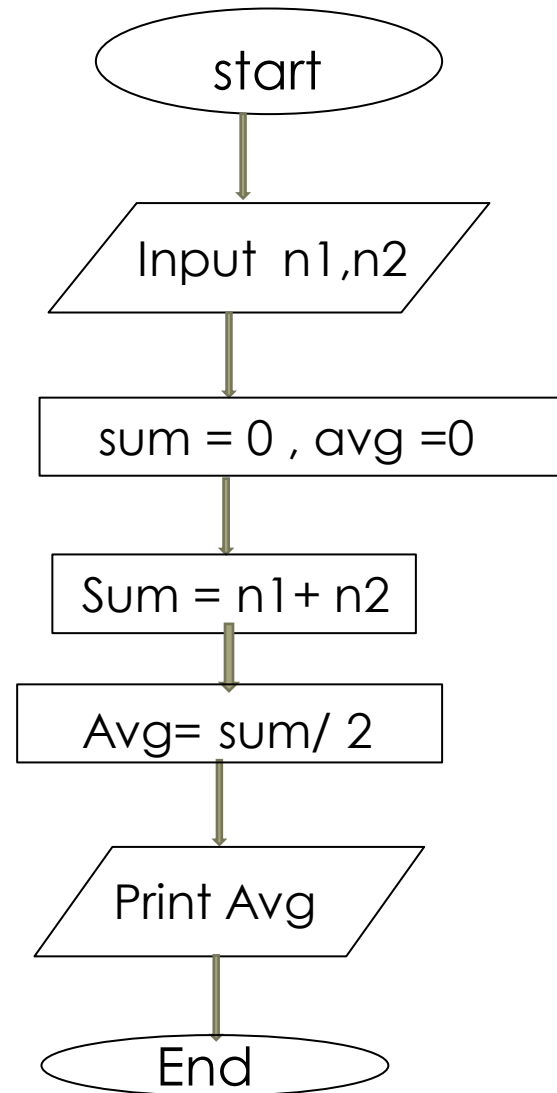
Flow Chart

Calculate sum of 2 numbers



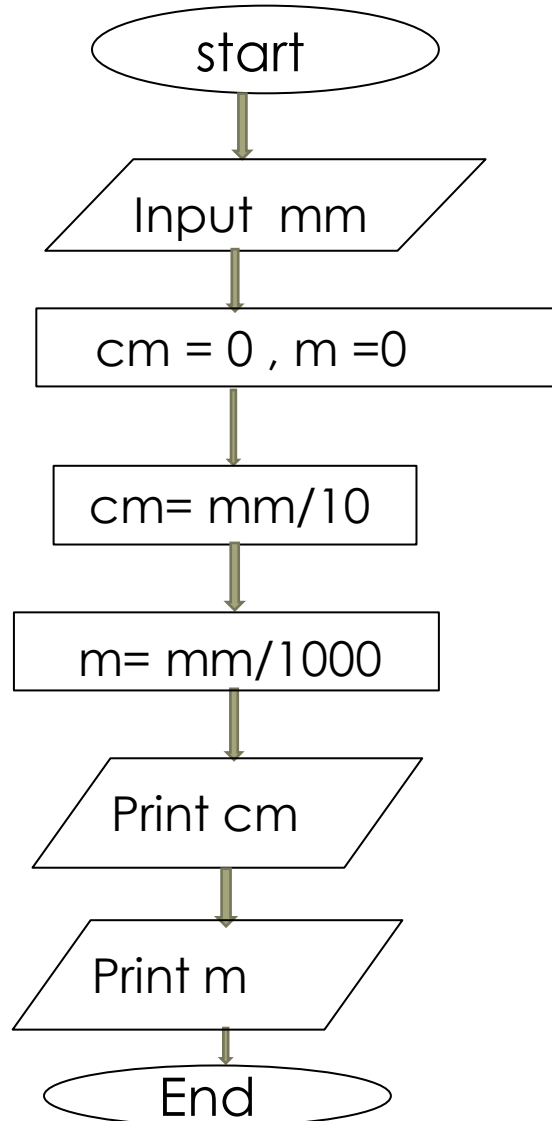
Flow Chart

Calculate average of 2 numbers



Flow Chart

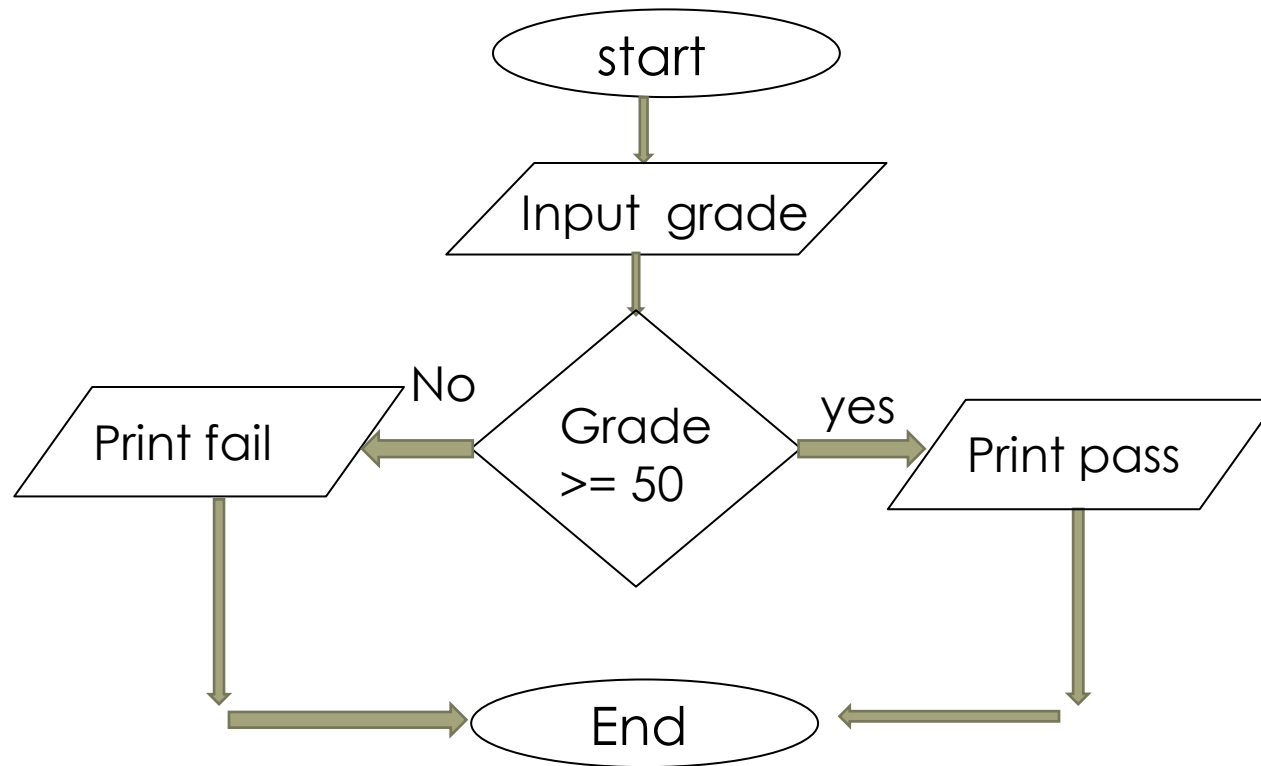
Read distance in millimeter and print distance centimeters and meters.



Flow Chart

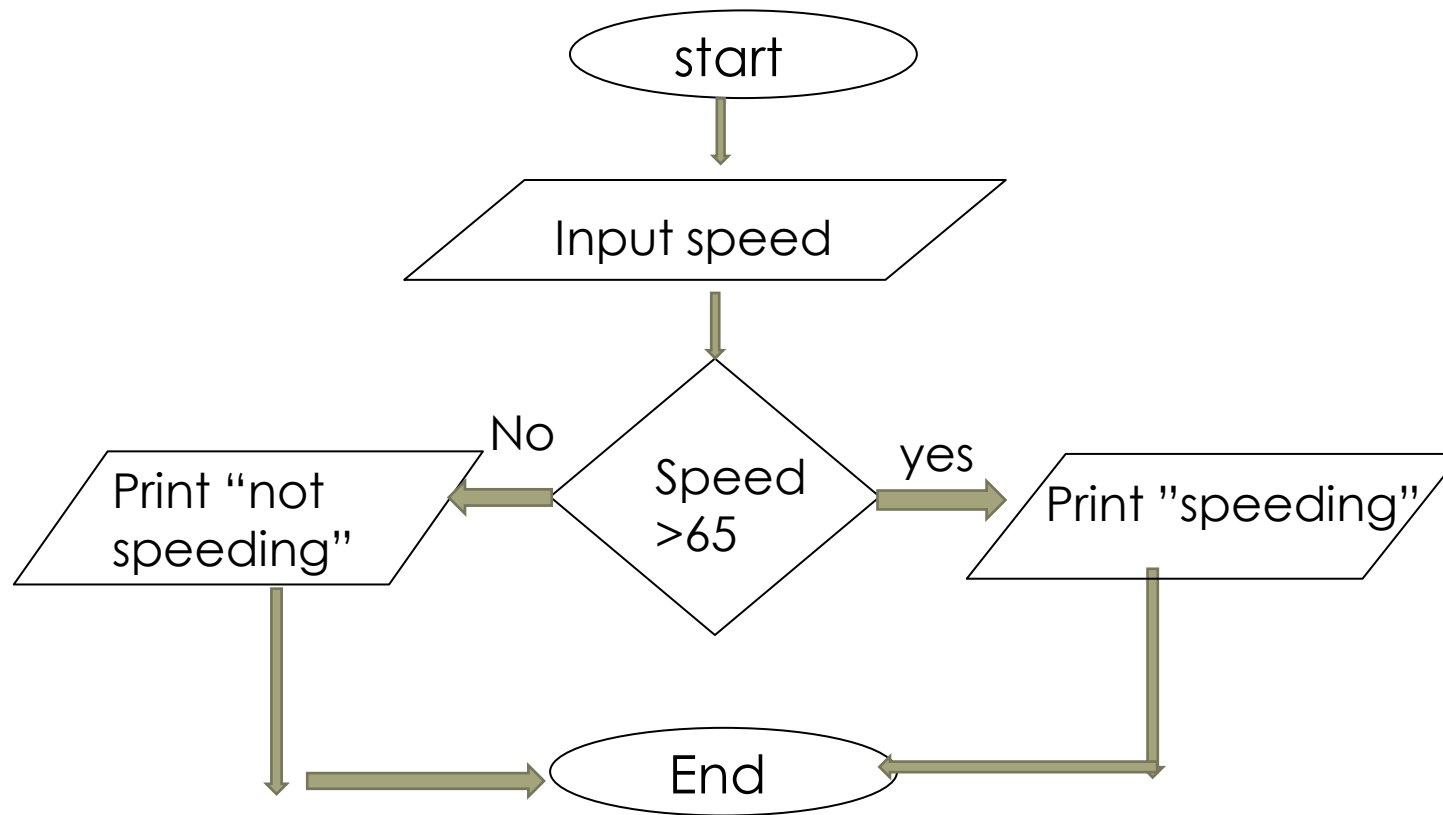
b. If- then-else structure

Display student pass or fail



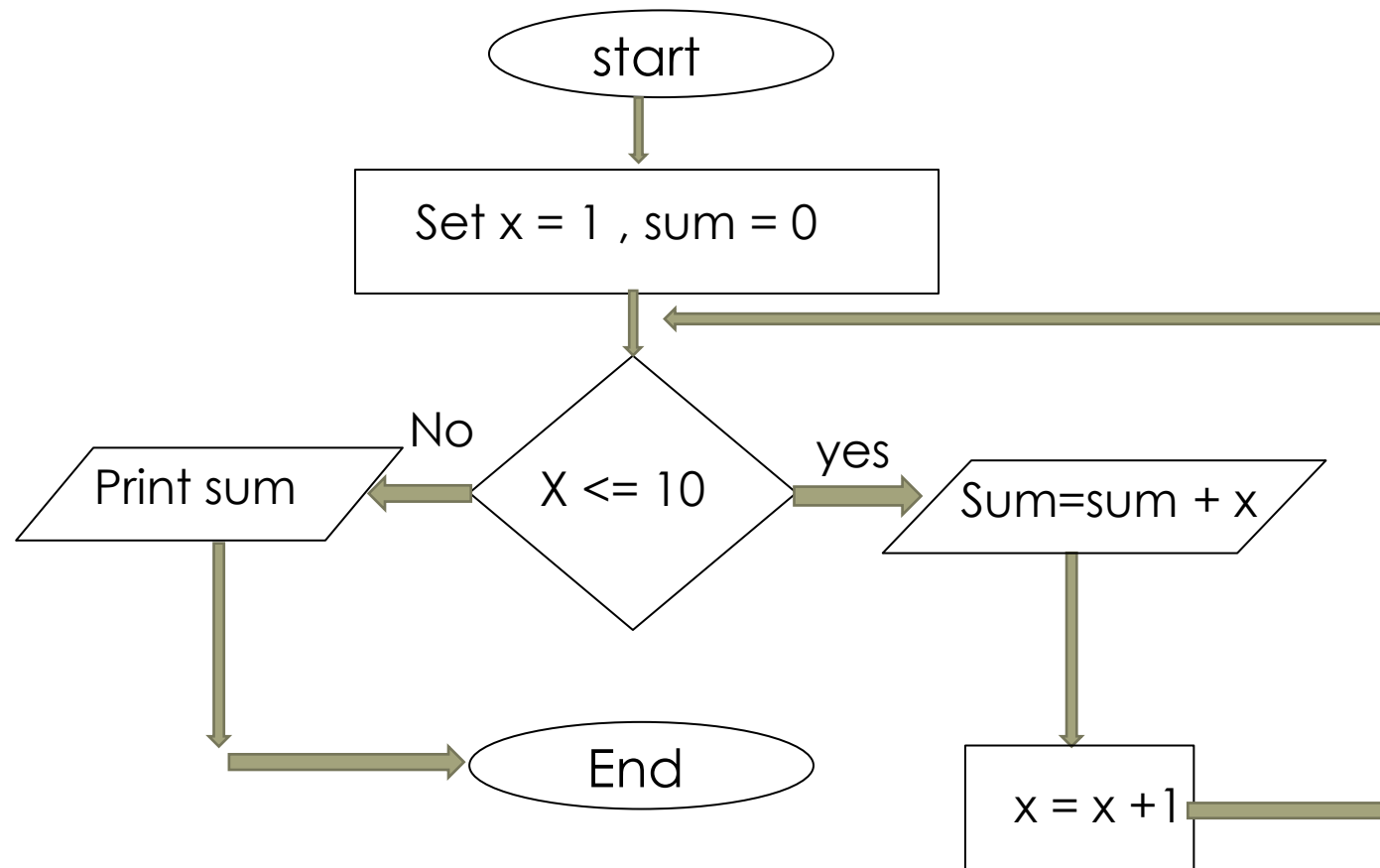
Flow Chart

Draw flowchart to simulate a state police radar gun , the program should take a car speed And display the message "speeding" if the speed exceeds 65 mph , "Not speeding" otherwise



Flow Chart

Get sum of numbers from 1 to 10

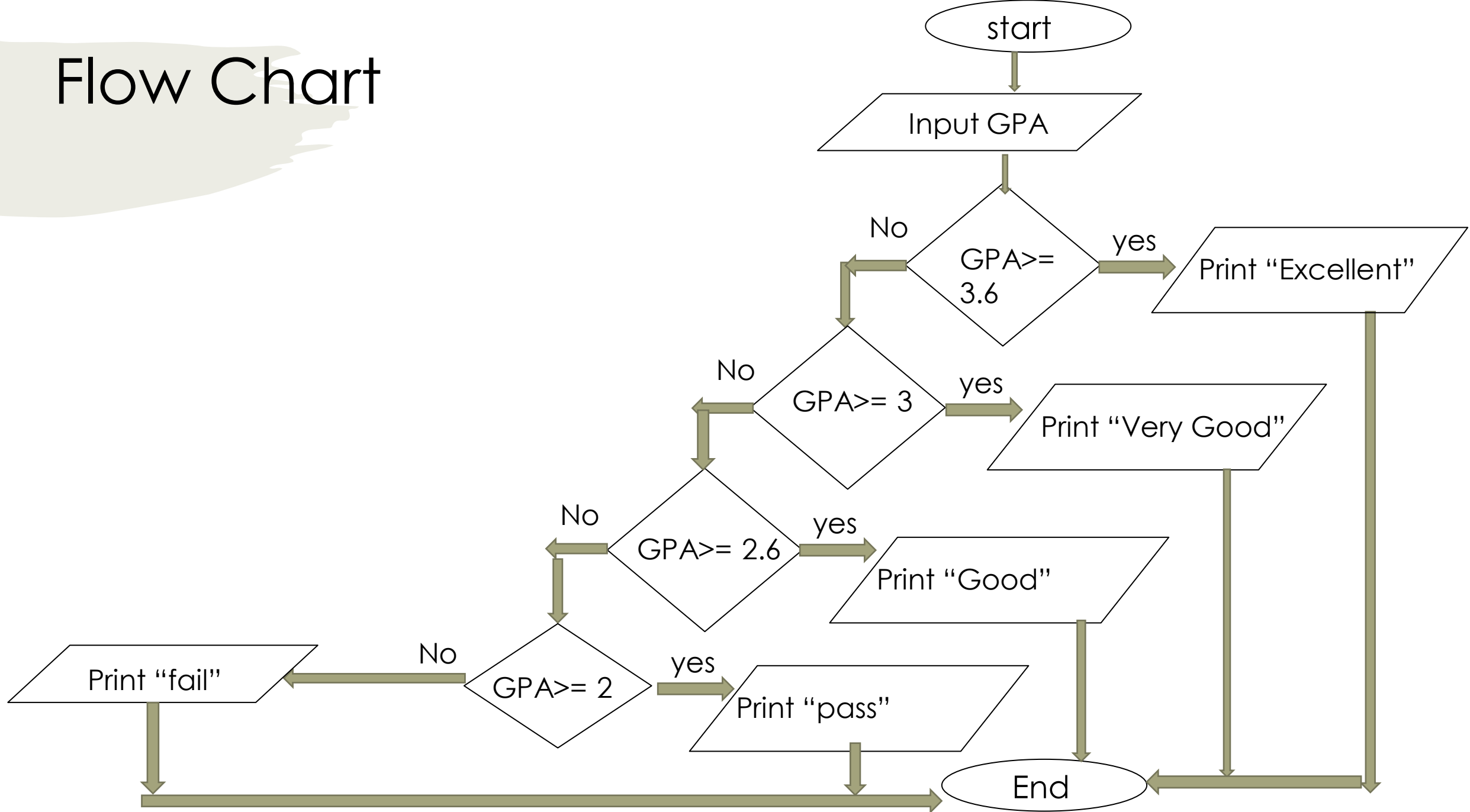


Flow Chart

Draw flowchart to display GPA Grade based on the following:

G.P.A SYSTEM:	Excellent	3.60 TILL	4.00
	Very Good	3.00 LESS THAN	3.60
	Good	2.60 LESS THAN	3.00
	Pass	2.00 LESS THAN	2.60
	Fail	LESS THAN	2.00

Flow Chart



THANK YOU 😊