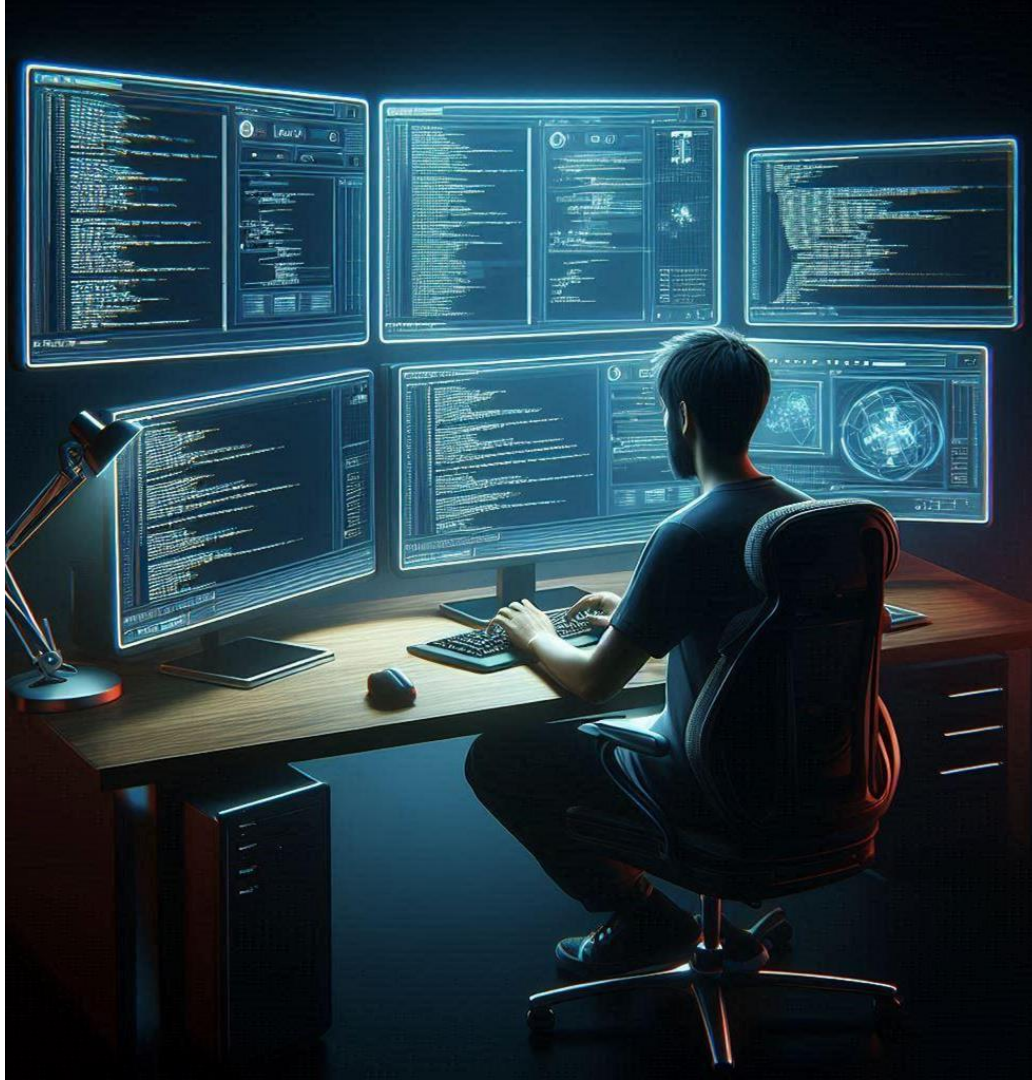
CSE 1110

Introduction to Computer System



Remember?
How a computer completes a task in our previous class?

Let’s consider another situation,

Tell your friend to find the area of a rectangle.

How will your friend carry out this task??

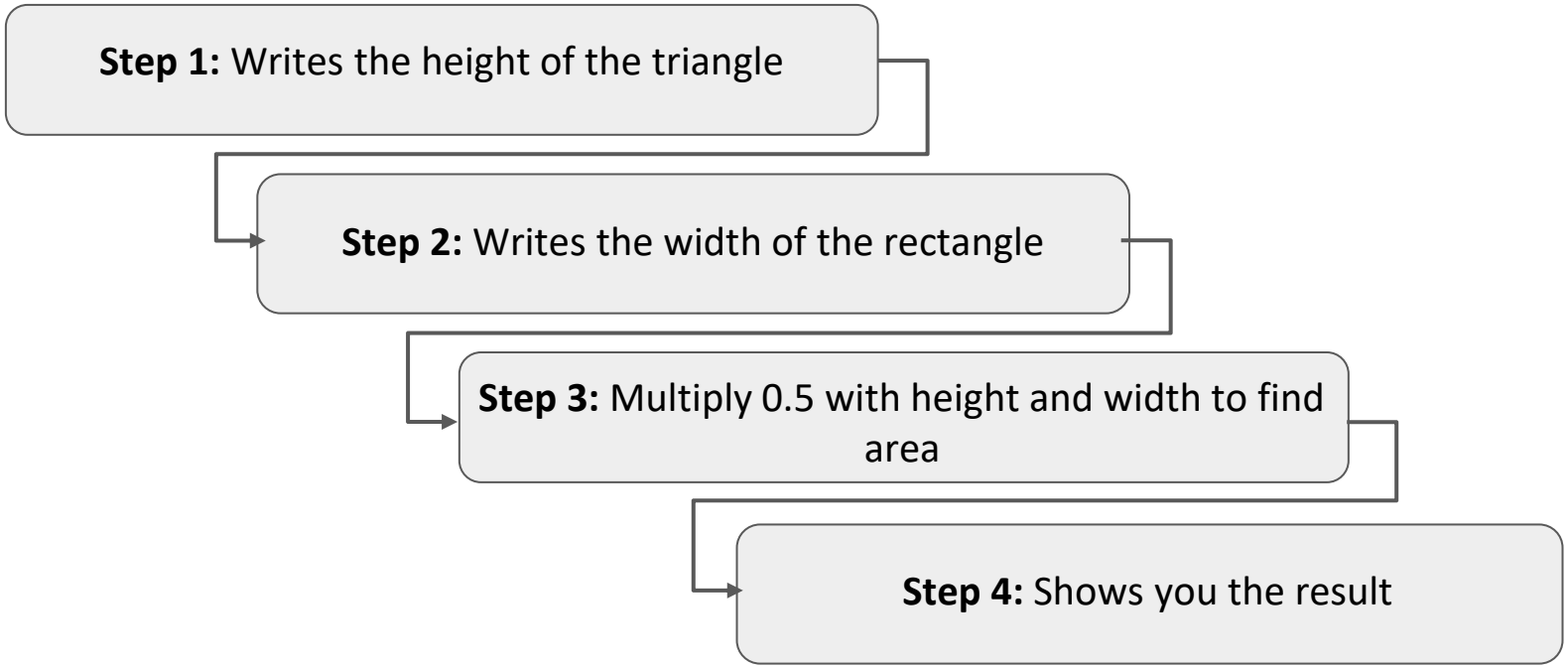
Let’s consider another situation,

Tell your friend to find the area of a triangle.

How will your friend carry out this task??

Solution Steps

Let’s take a look at the steps taken by your friend to solve this problem:



Let’s consider another situation,

The width and length of a rectangular garden are 20 meters and 15 meters, respectively. There is a road of width 2 meters around the outside boundary of the garden.

What will be the area of the path around the boundary of the garden?

Solution Steps

Let's take a look at the steps taken by your friend to solve this problem:

Step 1: Calculate the dimensions of the garden including the path.

Step 2: Calculate the area of the larger rectangle (garden plus path).

Step 3: Calculate the area of the garden itself.

Step 4: Calculate the area of the path

We've discussed about processes so far.

But what if I told you there's a way to show a problem's solution through a visual representation?

Step-by-Step process to make a cup of tea

- Begin the process.
- Collect tea bag, cup, kettle, water, etc.
- Boil Water, Turn on kettle.
- Place tea bag in cup or tea leaves in teapot.
- Pour over tea bag or into teapot.
- Wait for 3-5 minutes.
- Take out tea bag or strain leaves.
- Add milk, sugar, and stir.
- Drink the tea.



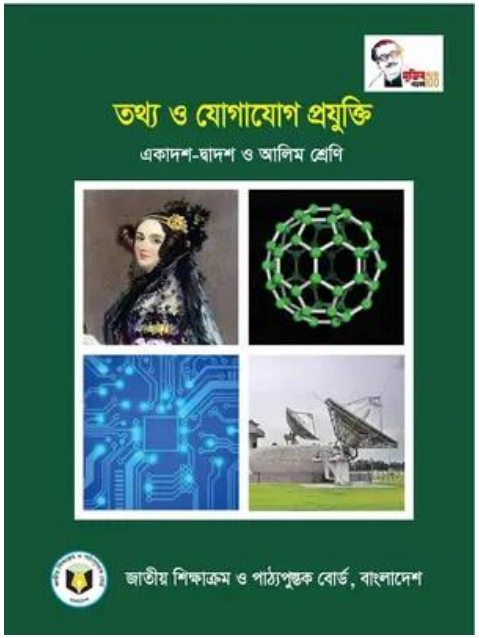


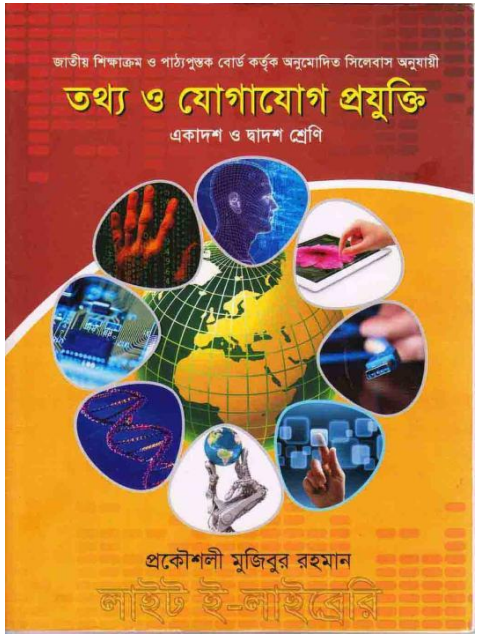


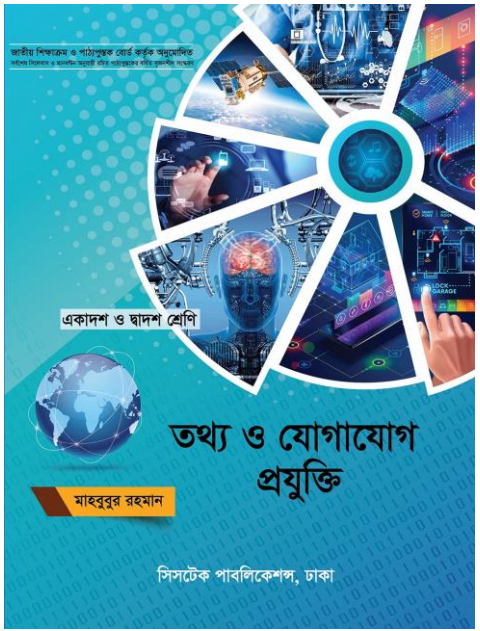

Now that we've gone through the step-by-step process of making a cup of tea and also seen it represented visually, which one did you find easier to understand and why?

Flow Chart

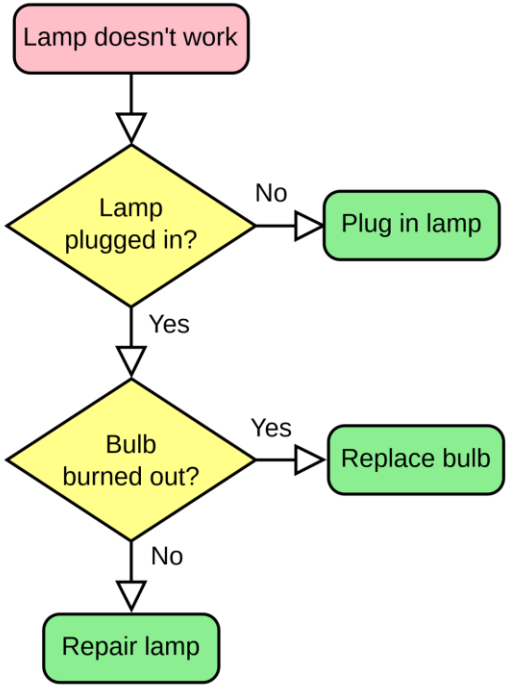
Do you remember this books?

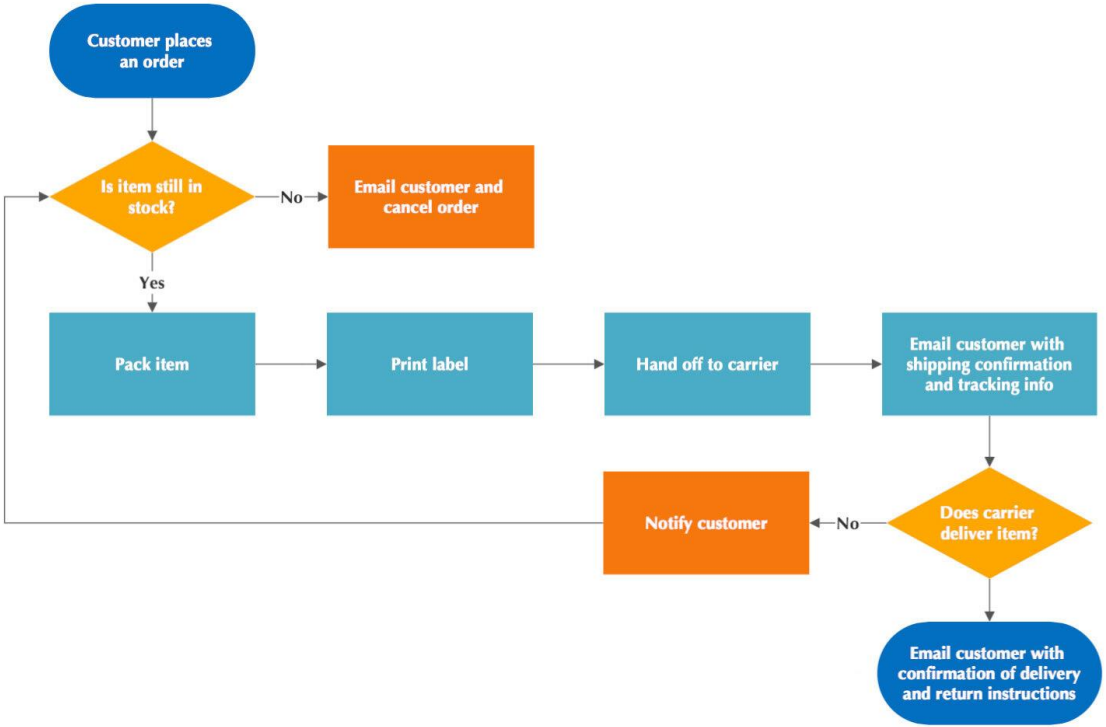


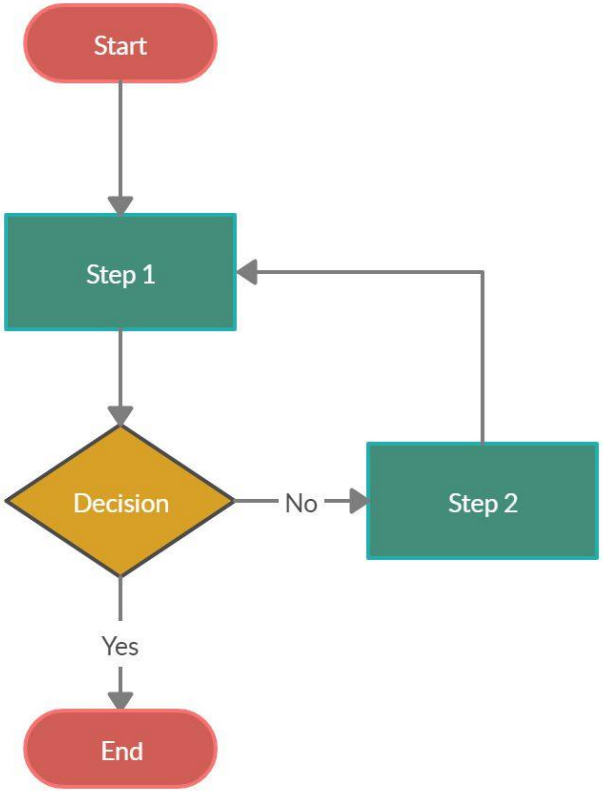




Do you remember this from the books?







Flowchart

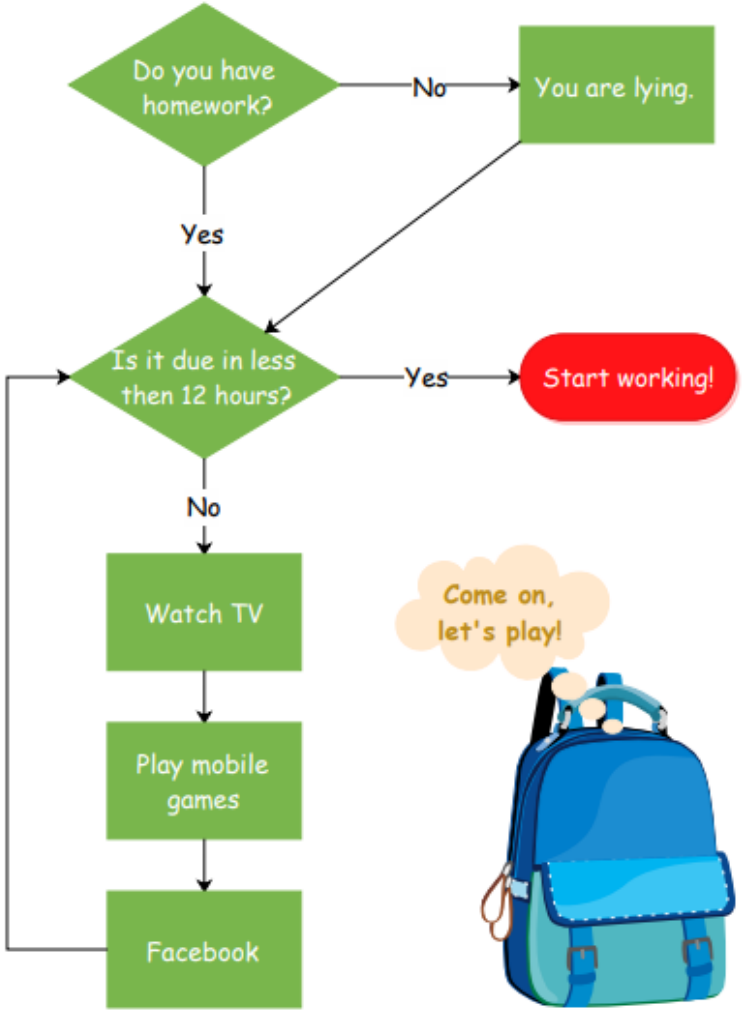
Represents the start or end of a process.

Denotes a process or operation step.

Indicates the flow Between steps.

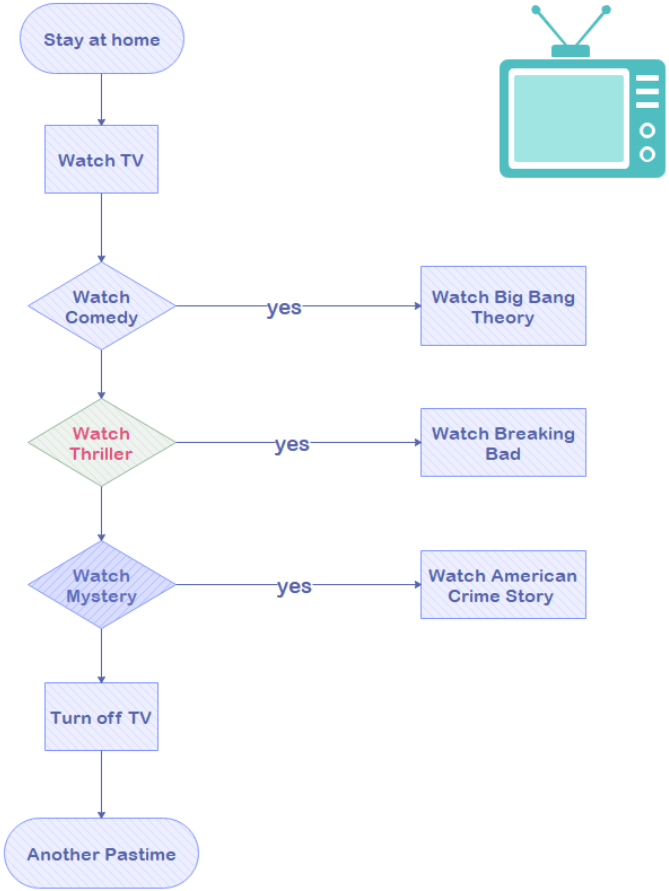
Signifies a point requiring a yes or no.

Used for input or output operations.

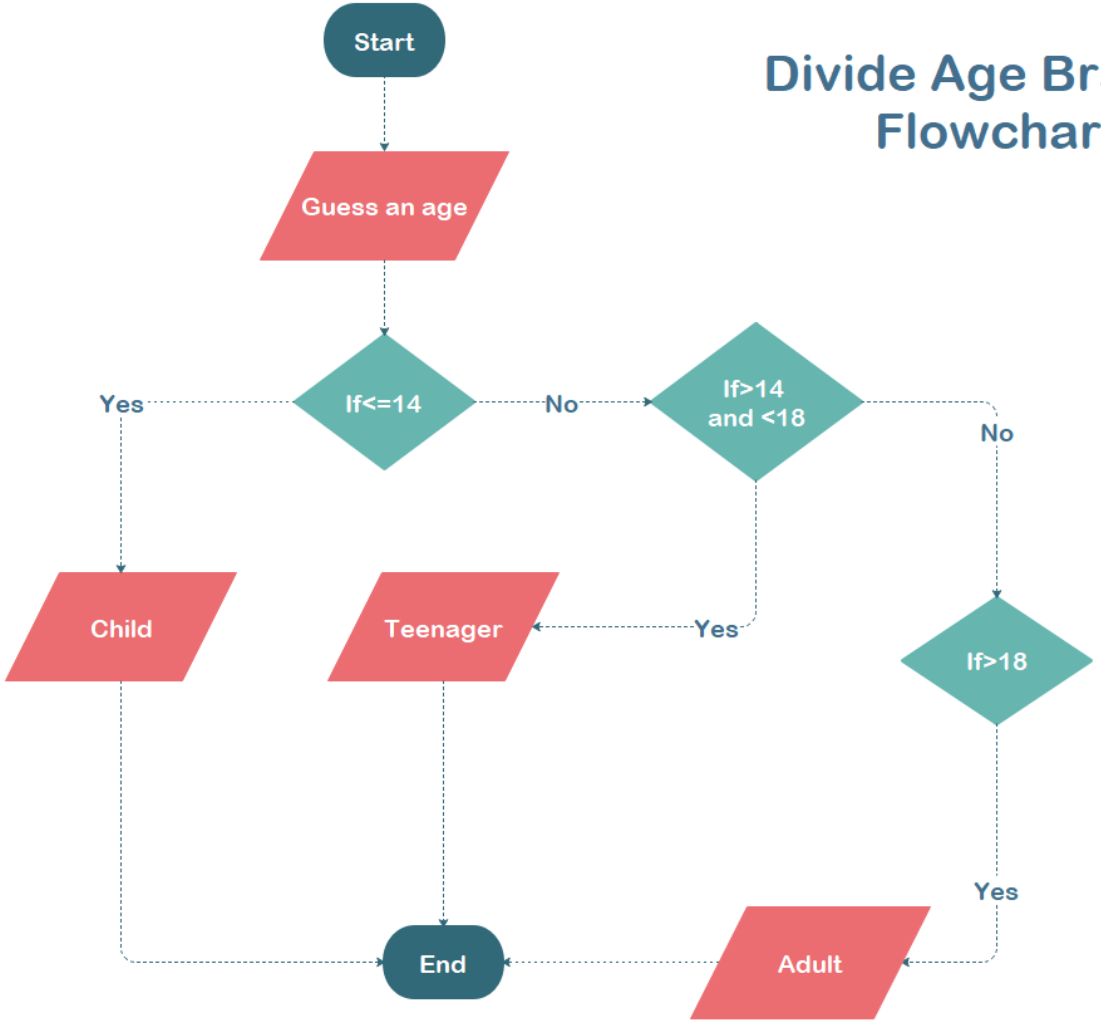


Funny Flowchart Example - Homework - Edraw (edrawsoft.com)

What Kind of TV Should I Watch?



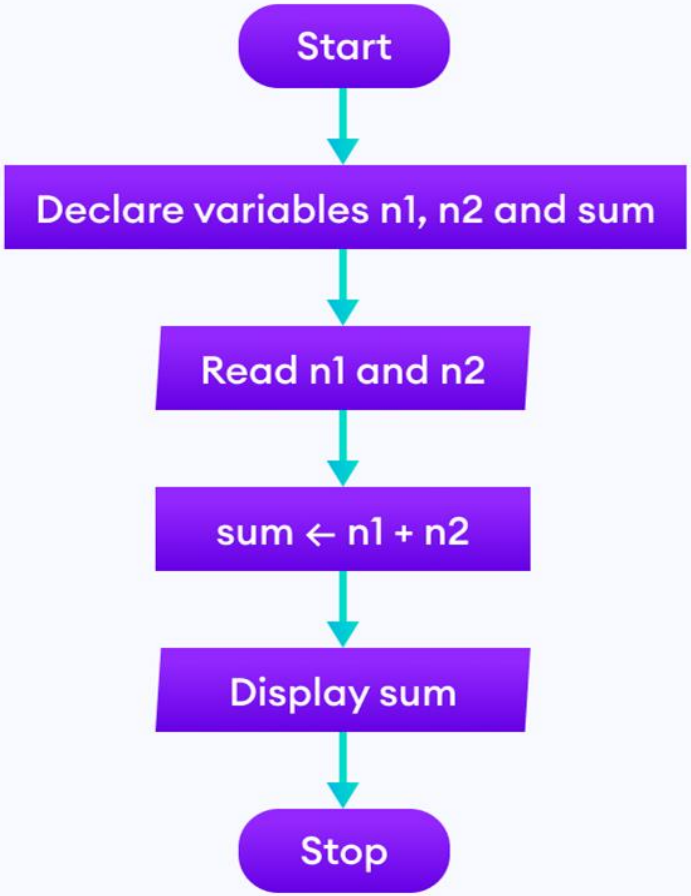
Divide Age Bracket Flowchart



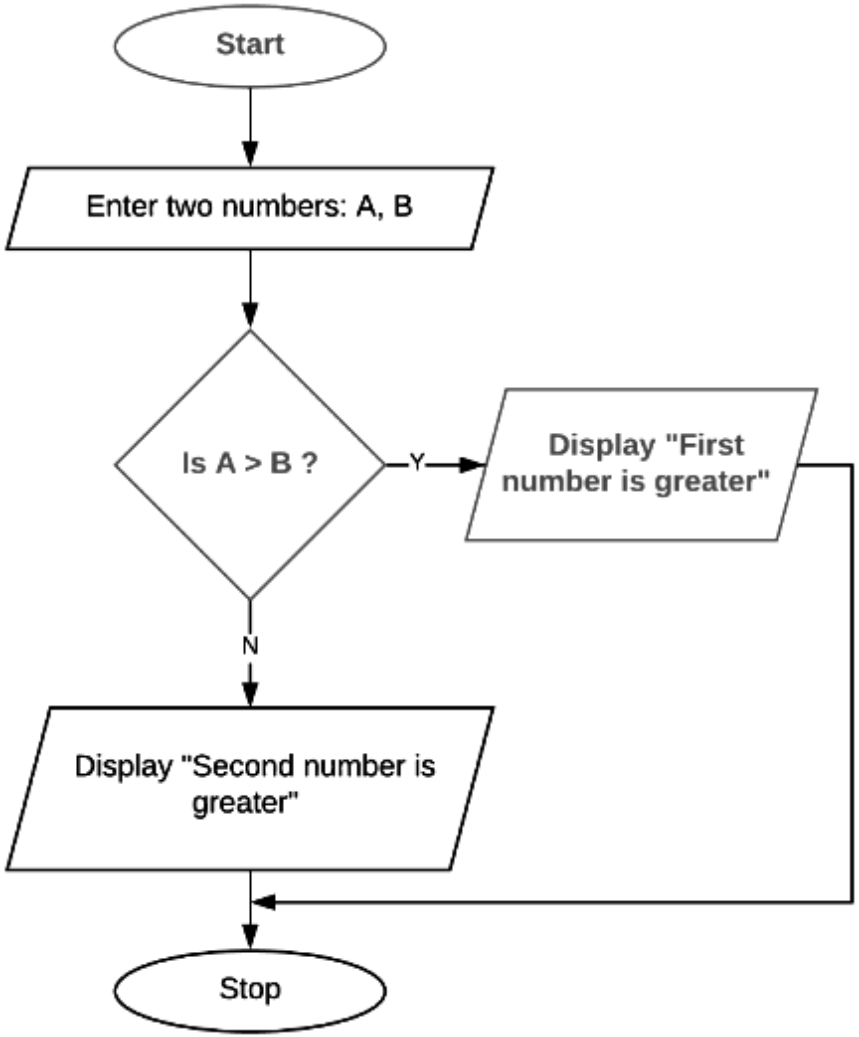
Let’s consider a situation/problem,

Tell your friend to find the sum of two numbers.

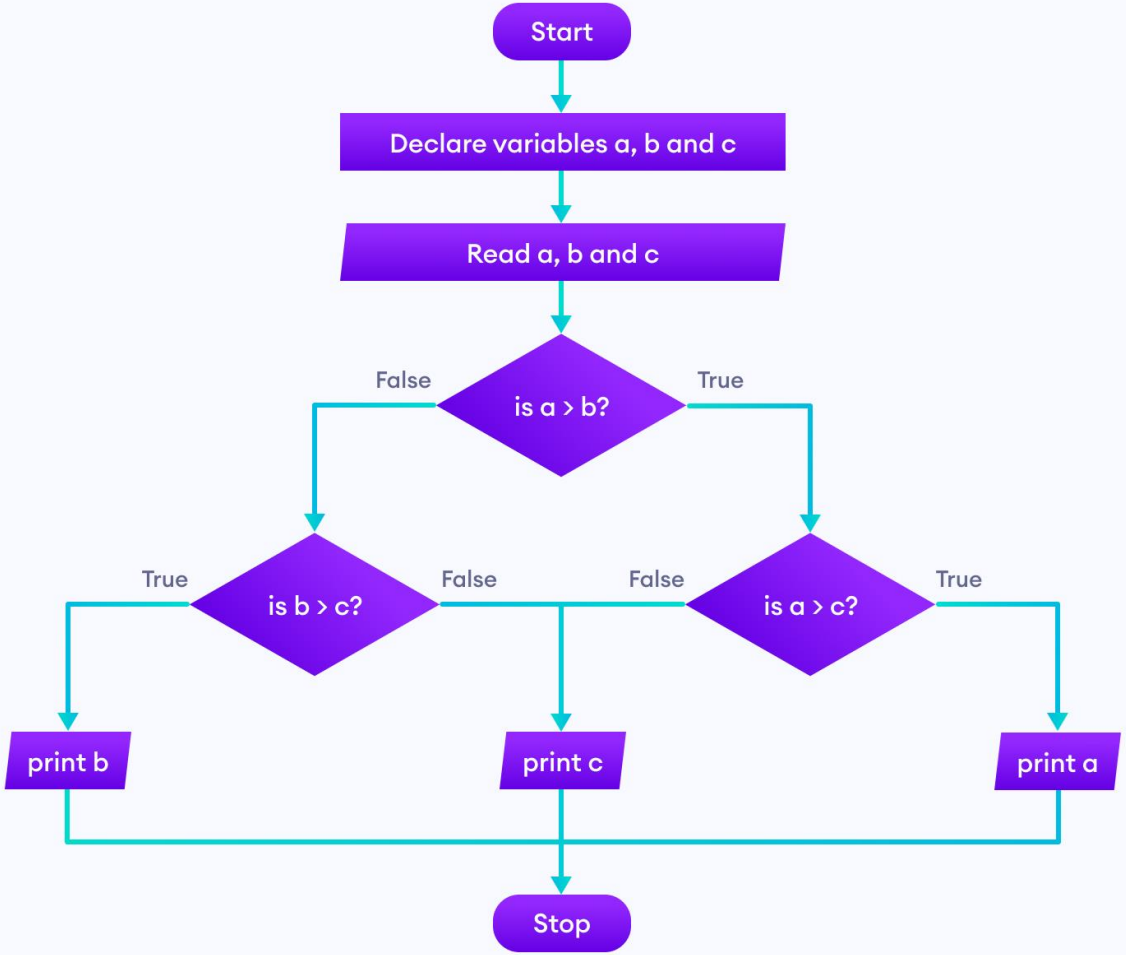
How will you do it using flow chart??



Flowchart of a Sum of two numbers



Flowchart of a Largest of two numbers



Can you make a flowchart of largest of three numbers?

- Install CodeBlocks in your Laptop/PC (CodeBlocks IDE Installation on Windows 10/11 [2023 Update] MinGW GCC Compiler | C & C++ Programming (youtube.com))
- What is MinGW GCC Compiler?

NEXT CLASS TASK

Any Questions?

Thank you