Quick Start Guide

Use Draw.IO. https://www.draw.io/

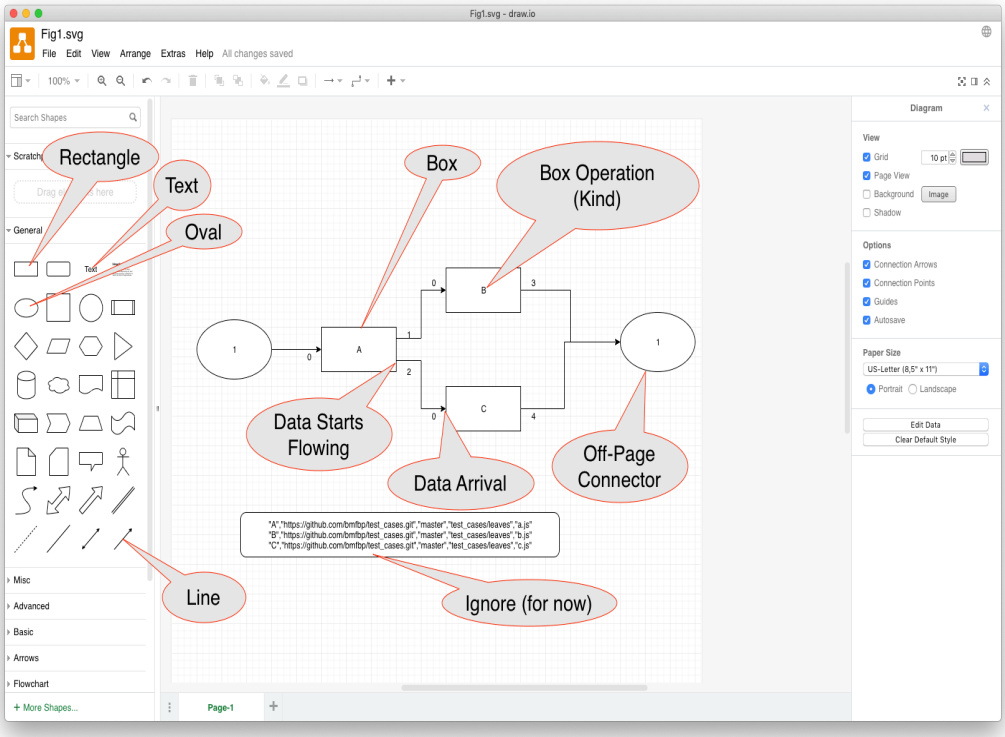

Figure: 1

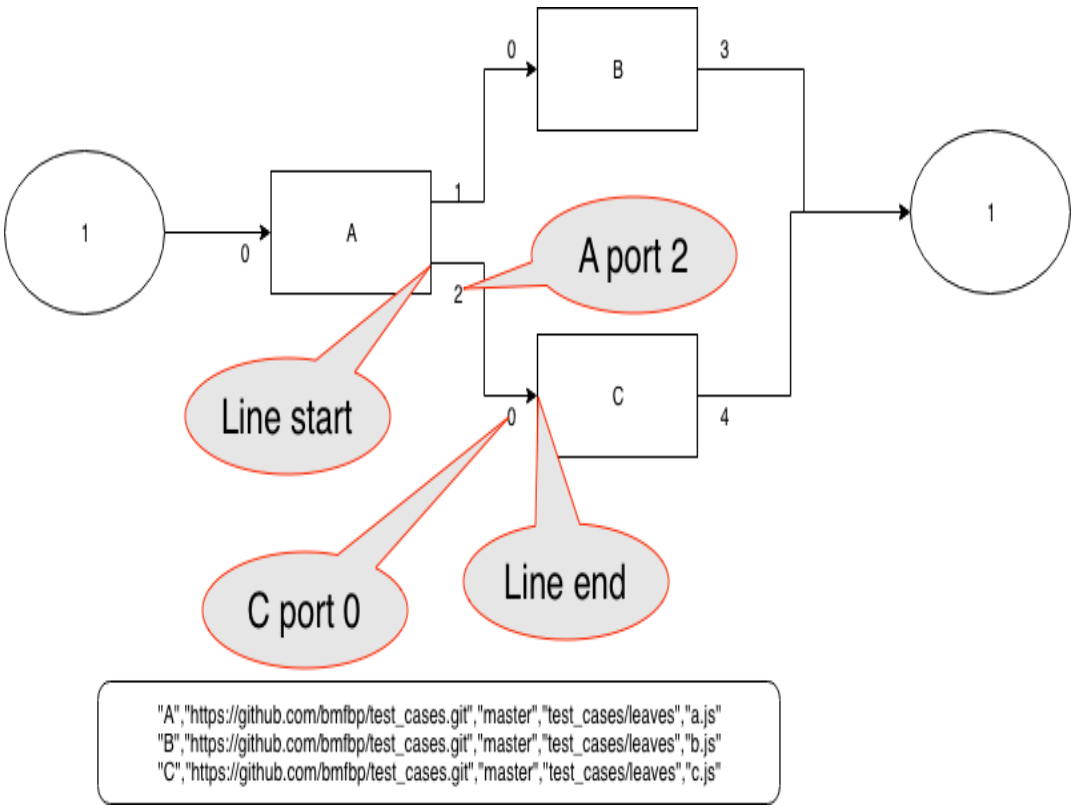

Figure: 2

Boxes (rectangles) are operations.

Lines with arrows are also called “wires” - connectors between boxes.

Ovals (ellipses) are connectors to the “outside world”.

Boxes are connected together with lines. Information flows from the back-end of a line to the arrowhead of a line. Information cannot flow in both directions.

Boxes enclose *one* piece of text. The text represents the kind of operation that the box (code) performs.

Numbers can appear near the arrowhead of lines and at the back-end of lines (no arrowhead).

Numbers near the back-end of a line are where the data starts to flow. The back-end of a line attaches to (one) box. That box shoves data into the line.

The numbers are used by the boxes - e.g. the box puts data “xyz” onto its *output #0*.

Numbers near the arrowhead of a line are where the data arrives. The arrowhead of a line touches (one) box. The attached box slurps up the data and presents it to the insides of the box as arriving at the arrowhead on *input #*.

The numbers at the back-end and at the arrowhead ends of a line are called *ports*. For example in Figure: 2, box “A” has three ports - one *input port* called “0” and two *output ports* called “1” and “2” and box “C” has one *input port* called “0” and one *output port* called “4”.

Lines can be unattached at one end (either the back-end or the arrowhead end, not both). This is shown in Figure: 3.

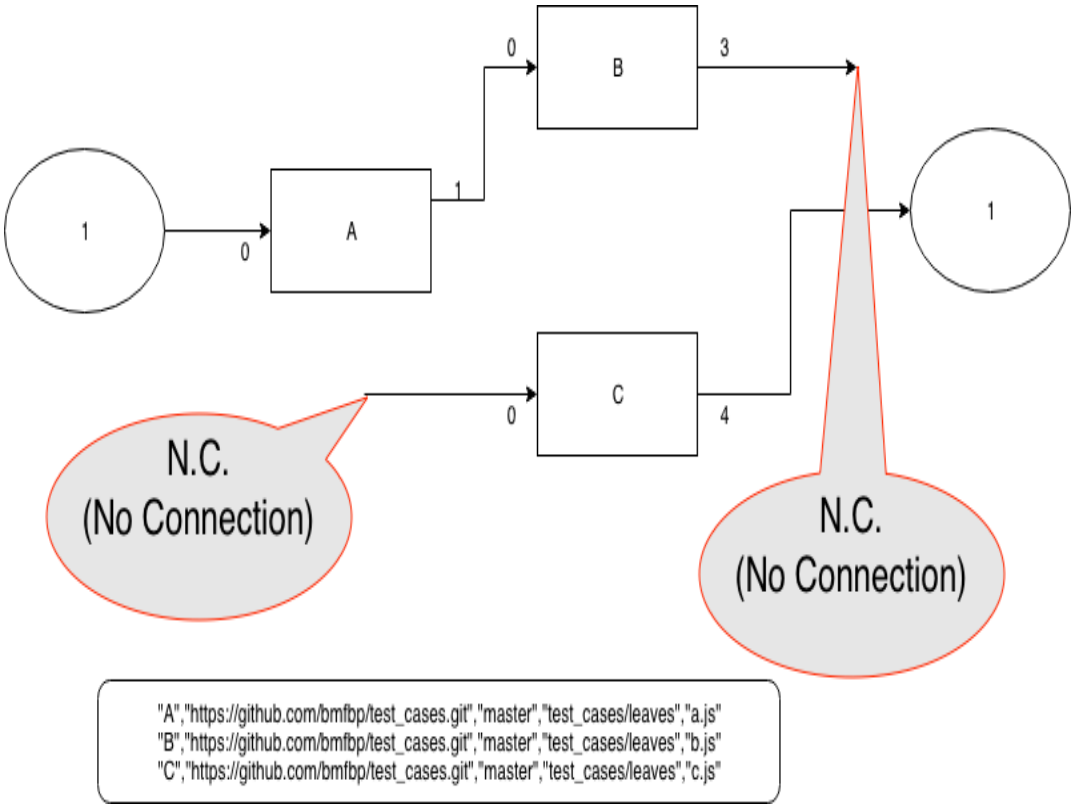

Figure: 3

Imagine that everything is “smart”. Every box on the diagram has its own

computer and memory.

Suggestion: start with one main box - top-most - and work downwards. Make it into a Draw.io diagram.

Question 1: What are the main inputs and the main outputs of the top-most box?

Question 2: How does the main - top-most - box break down? How many boxes make up the top-most box.

Draw a new diagram that shows the boxes from Question 2. Give each box a descriptive name using text[1].

The inputs and outputs are drawn as ovals on the second diagram. Choose input numbers (indexes) for the ovals. Edit the indexes inside the ovals as text[2]. Indexes start at 0 (zero) and are always positive numbers. Input indexes don't conflict with output indexes (so, the same index numbers can be used on the input side as on the output side).

[1] Hint: double-clicking inside the box will allow you to add/edit the text inside the box.

[2] Hint: double-clicking inside the oval will allow you to edit the text inside the oval.