
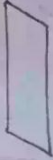


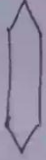


Algorithm and Flowchart :-

In order to write computer programs without any logical error, it is recommended programmers prepare a rough writing showing the steps involved in the program. This is called an algorithm.

Flowchart is a symbolic or diagrammatic representation of an algorithm. It uses several geometrical figures to represent the operations, and arrows to show the direction of flow.

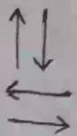
Following are the commonly used symbols in flowcharts :

<u>Symbol</u>	<u>Operation</u>	<u>Meaning</u>
	Start/Stop	Represents the beginning and the end of the flowchart.
	Input/Output	Represents the values to be given by the user and the results to be displayed.
	Processing	Represents the arithmetic operations to compute a value.
	checking/decision making	Represents the logical checking to decide the flow sequence.
	Looping	Represents the looping which is repeated based on a condition/ value of a variable.



Connector

Represents the continuity of the flowchart in another place/page.



Arrows

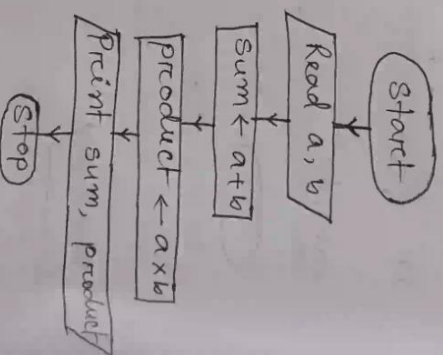
Represent direction of flow.

1.Q. Write the algorithm and draw the flowchart to find the sum and product of given two numbers. [2015]

Solⁿ: Algorithm

1. Read a, b
2. Sum $\leftarrow a+b$
3. Product $\leftarrow axb$
4. Print sum, product
5. stop

Flowchart



2.Q. Write the algorithm and draw the flowchart to find the area of a triangle whose sides are A, B and C.

Solⁿ: We know that, the area of triangle

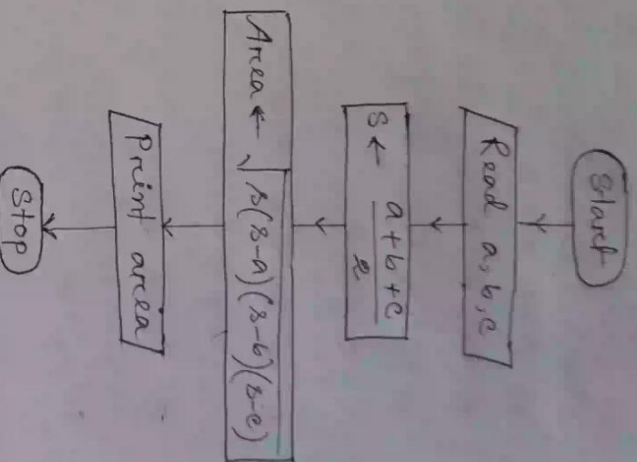
$$= \sqrt{s(s-a)(s-b)(s-c)}$$

$$\text{where, } s = \frac{a+b+c}{2}$$

Algorithm

1. Read a, b, c
2. $s \leftarrow \frac{a+b+c}{2}$
3. Area $\leftarrow \sqrt{s(s-a)(s-b)(s-c)}$
4. Print area
5. Stop

Flowchart

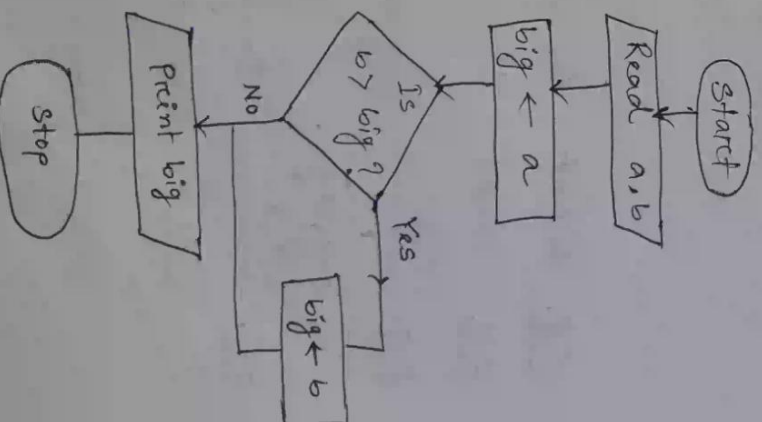


3.8. Write the algorithm and draw the following flowchart to find the biggest of the given two numbers. [2013]

Solⁿ: Algorithm

1. Read a, b
2. $big \leftarrow a$
3. If $b > big$ then
 $big \leftarrow b$
4. Print big
5. Stop

Flowchart

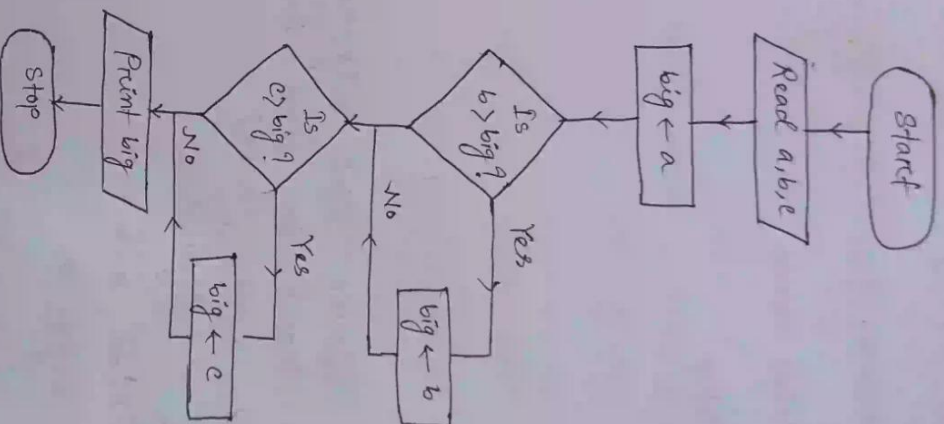


4.Q. Write the algorithm and draw the flowchart to find the biggest of the given three nos.

Solⁿ Algorithm

1. Read a, b, c
2. $big \leftarrow a$.
3. If $b > big$ then
 $big \leftarrow b$
4. If $c > big$ then
 $big \leftarrow c$
5. Print big
6. Stop

Flowchart



5.Q. What is an algorithm? (2018, '14, '15)

6.Q. What is a flowchart? (2015).

7.Q. _____ programming method is followed in C language.
Ans:- Procedural.

8.Q. _____ programming method is followed in C++.
Ans:- Object oriented.

_____ X _____