






PYTHON

- Python is a general-purpose interpreted, interactive, object-oriented and high-level programming language
 - Open source: <https://www.python.org>
 - Python is widely used in the field of AI, GUI applications, web applications etc
 - In Python IDLE, the word IDLE means: Integrated Development and Learning Environment
 - The function key to run Python is: F5
 - The default extension of a Python programme file is **.py**
 - Default Python Command Prompt: (>>>)
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- The first step in Python programming is developing the **Problem Algorithm**
 - 1) Understand the Problem
 - 2) Develop Program Logic: Program Flow
 - 3) Develop Program Algorithm (a sequence of steps / instructions to solve the problem in simple English) : Flow Chart

SYMBOLS	PURPOSE	
	START / STOP	At the beginning at the end
	Process Box	1) All mathematical operations ($a+b = c$, $a \geq d$) 2) Value assignment (Height = 76 cm) $h = 76$
	Input / Output Box	For representing "Input" or "Output" operation in a process
	Decision Box	Conditional Statement (Yes/No), (True/False)
	Flow Lines	Describe the program flow

Example: 1

Write an algorithm and draw a flowchart to accept two numbers. If the two numbers are equal, then find the sum. Otherwise, find the product.

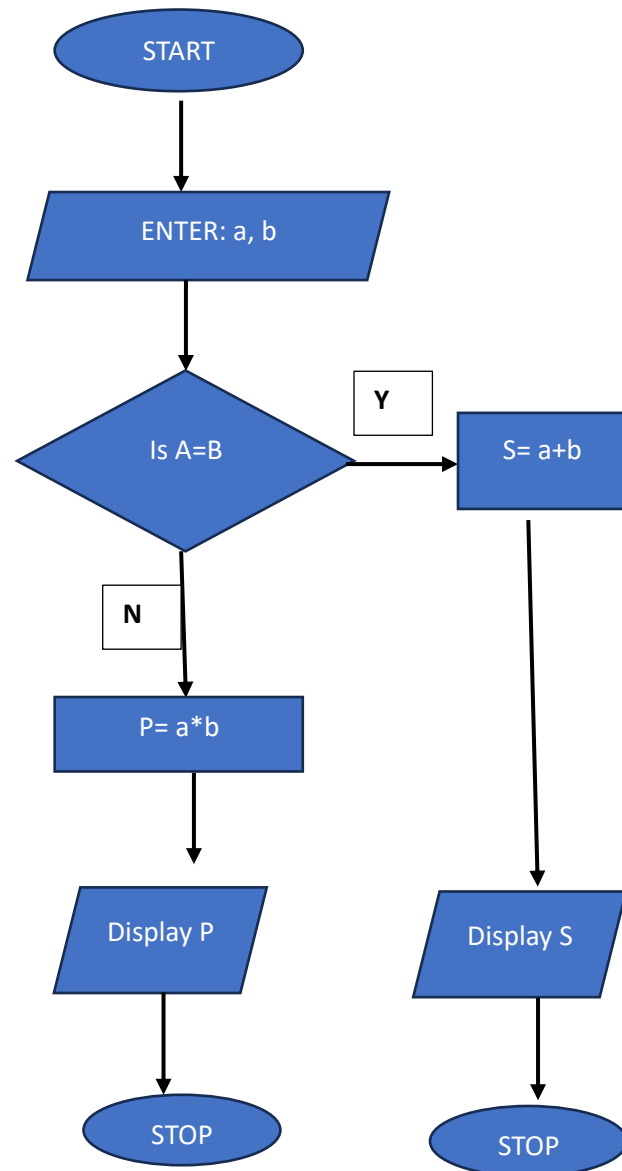
Algorithm:

Steps:

- 1) Start
- 2) Initialize **a** and **b**
- 3) Accept values of 'a' and 'b'
- 4) Check if

$$a == b$$

- 5) $S = a + b$
- 6) Display S
- 7) Else
- 8) $P = a * b$
- 9) Display P
- 10) Stop



Try at Home:

Write an algorithm to input a number and check whether it is a prime number or not.