Flow Charts

Flow Chart

- A diagram consisting of predefined symbols that represents an algorithm or process

Flow Chart Symbols: Process Operations

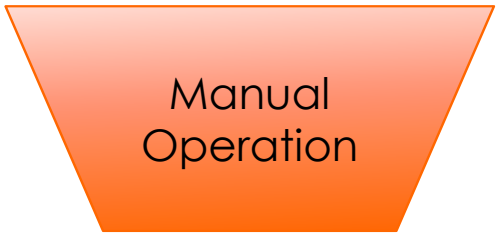
Indicates a process or action

Represents a process that is an alternative to the 'regular' process

Represents instructions that can be executed multiple times

Flow Chart Symbols: Process Operations

Stores preparation measures before defining a process



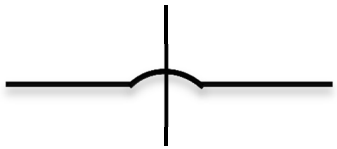
Depicts non automated processes, can represent processes performed by hand

Depicts a "waiting period" that belongs to a process

Flow Chart Symbols: Flow

Indicates the direction of flow in the flow chart

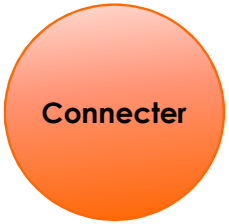
Typically used when showing comments, or alternative processes (comments do not have arrows)



Line crossing

Flow Chart Symbols: Flow

Represents begin, end, and return section



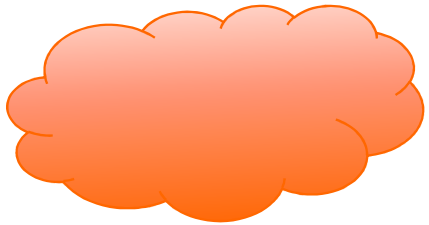
Connects two sections of a flow chart

Connects two sections of a flow chart that are on separate pages

Flow Chart Symbols: Flow

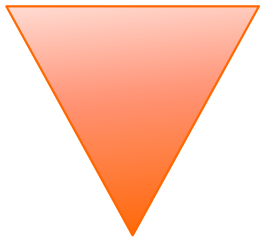
Represents a decision being made

Decision list is often used with a decision to indicate multiple outcomes

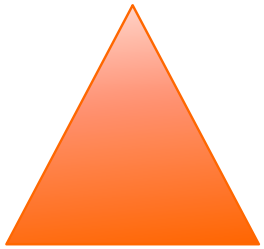


Represents a network, such as LAN, WAN, & Internet

Flow Chart Symbols: Flow

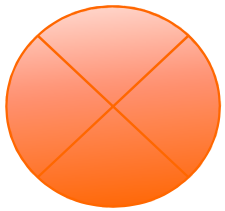


Represents data or processes being merged

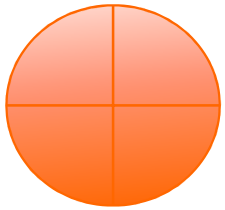


Represents data being extracted or a process being split into multiple paths

Flow Chart Symbols: Flow

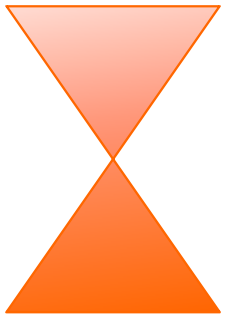


Summation Junction takes two inputs and the output is the sum of them

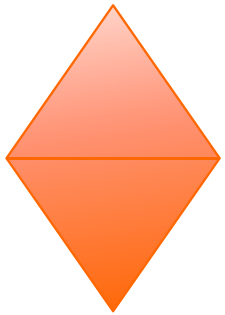


Or takes two inputs and the output is a logical OR operation

Flow Chart Symbols: Process Operations



Collate operation represents converting data from its input format into a standardized form



Sort operation indicates data items must be sorted or organized

Flow Chart Symbols: I/O

Represents input and output from a process

Indicates data that is displayed to the user

Represents user input, usually with a keyboard or mouse

Flow Chart Symbols: I/O

Indicates a process that produces or uses a document

Indicates a process that produces or uses multiple documents

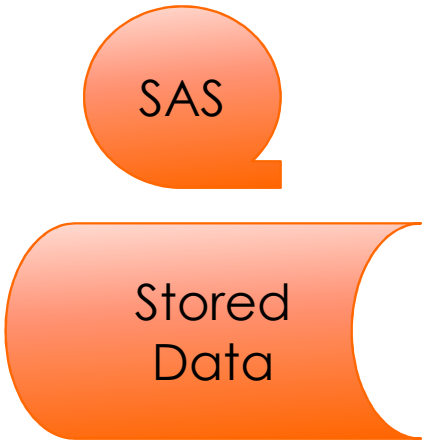
Flow Chart Symbols: Storage

Usually represents information stored in RAM storage

Represents a storage location, such as a database

Typically represents hard disk storage

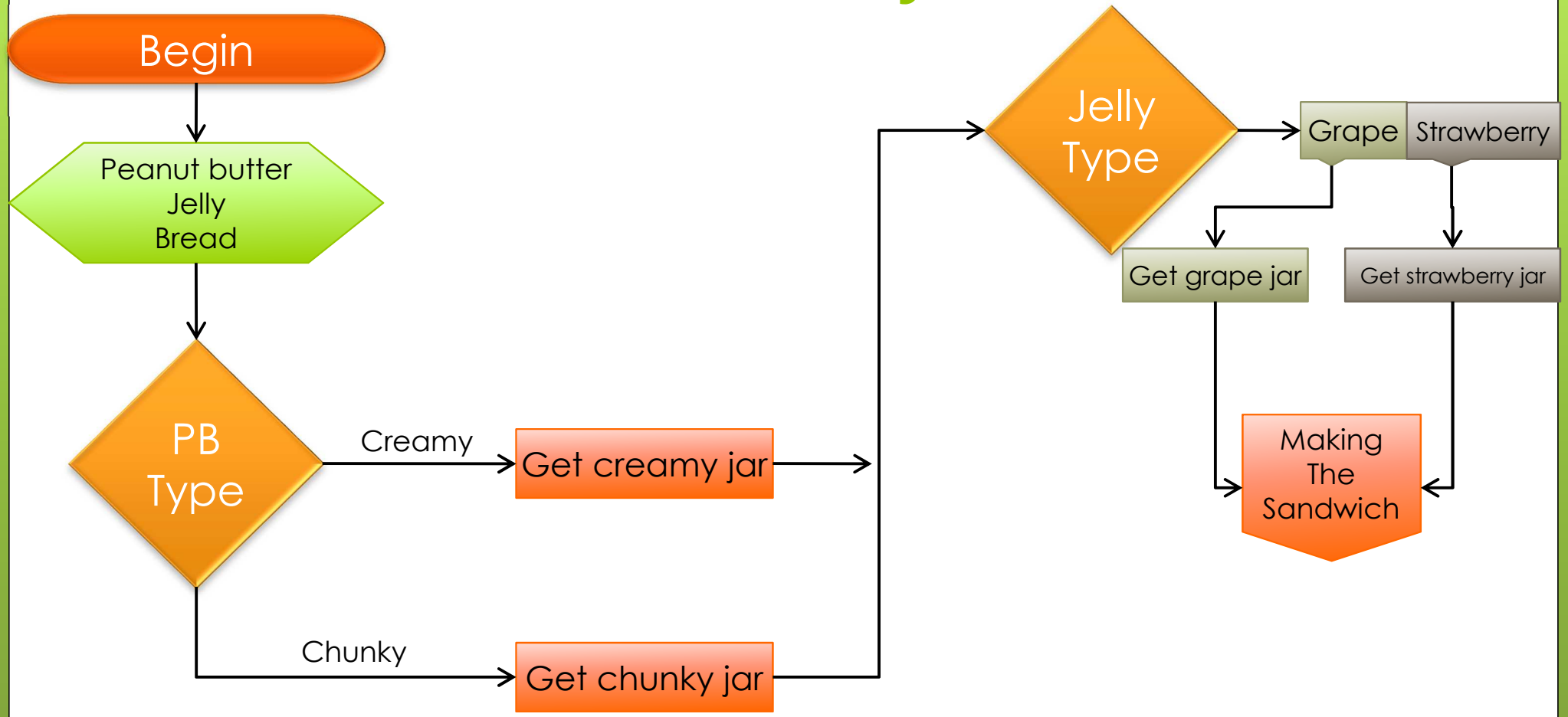
Flow Chart Symbols: Storage



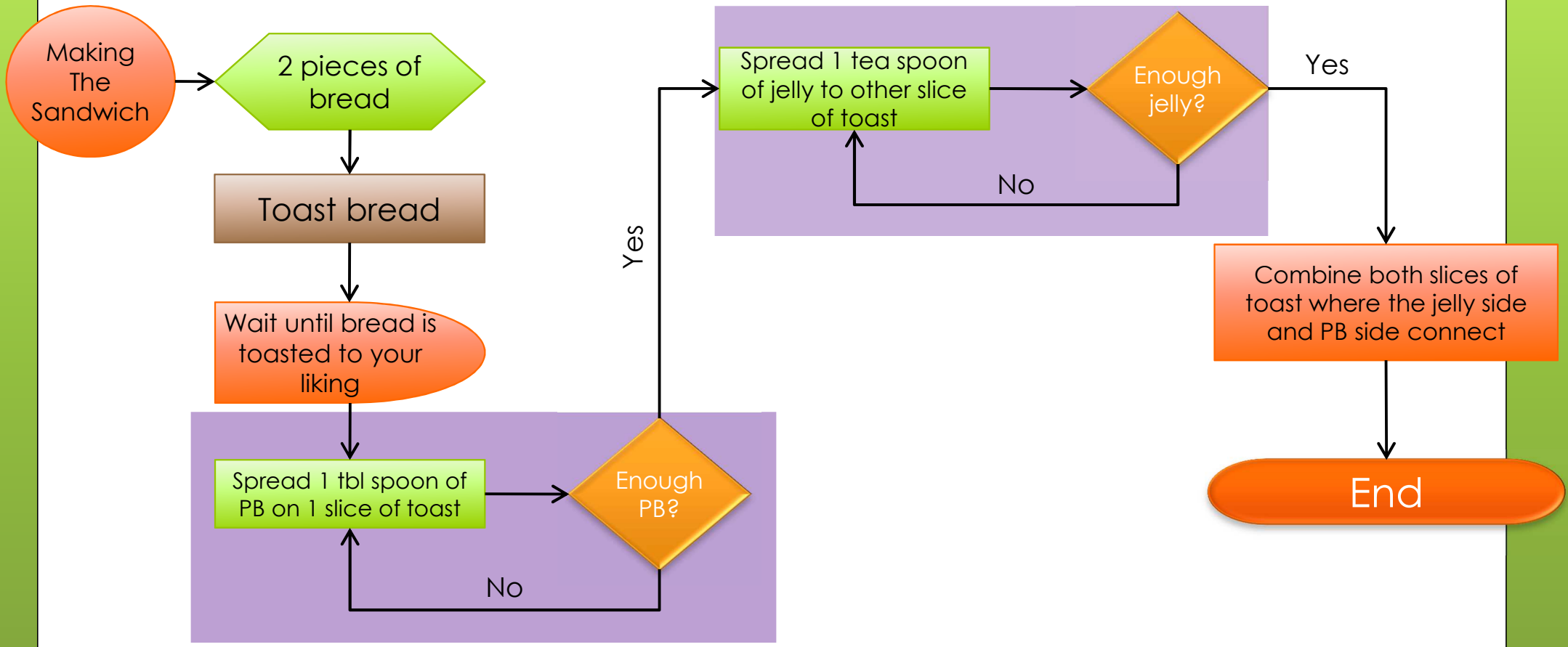
Represents Sequential Access Storage media, such as a magnetic tape reel

Represents a generic data storage operation

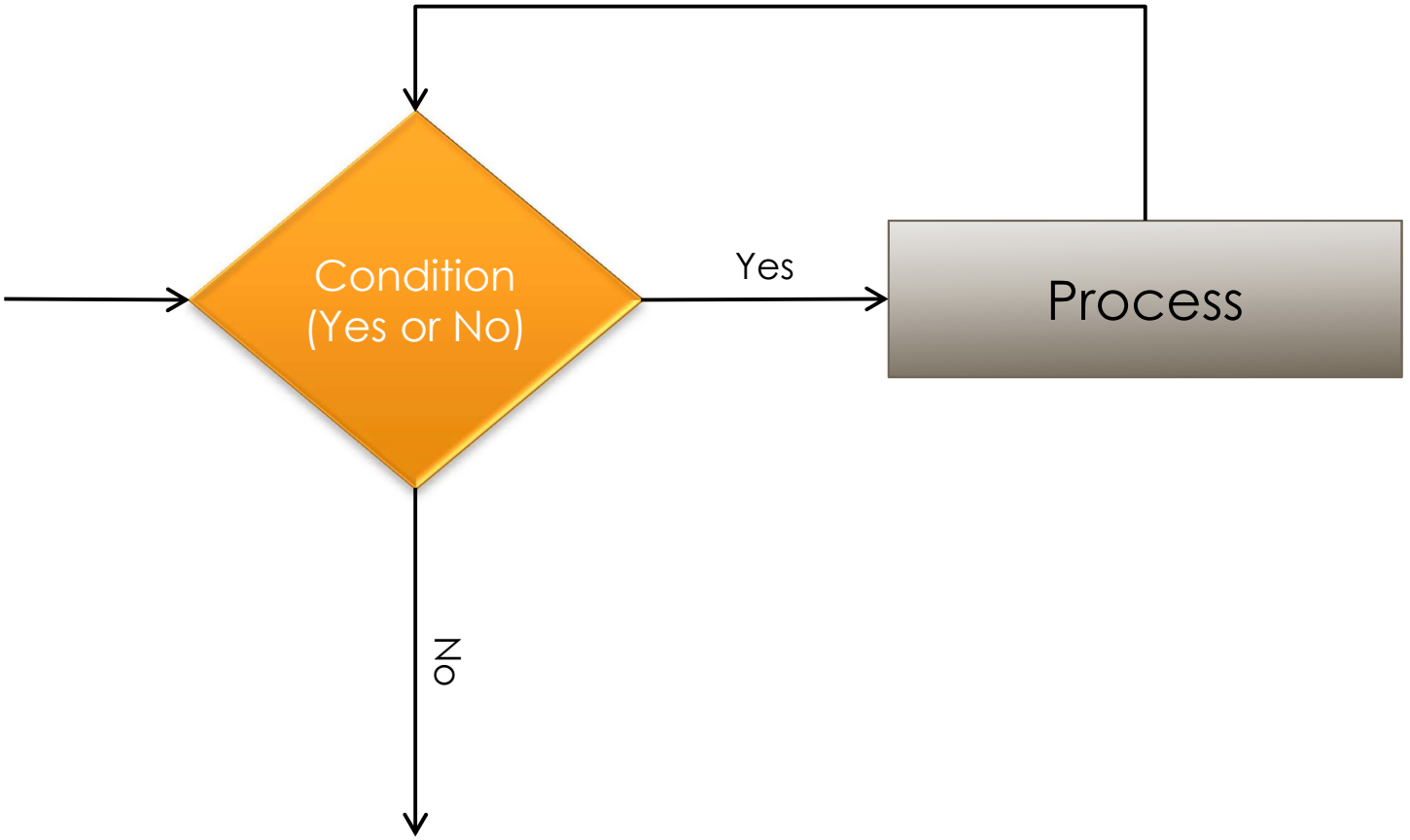
Peanut Butter & Jelly Flow Chart



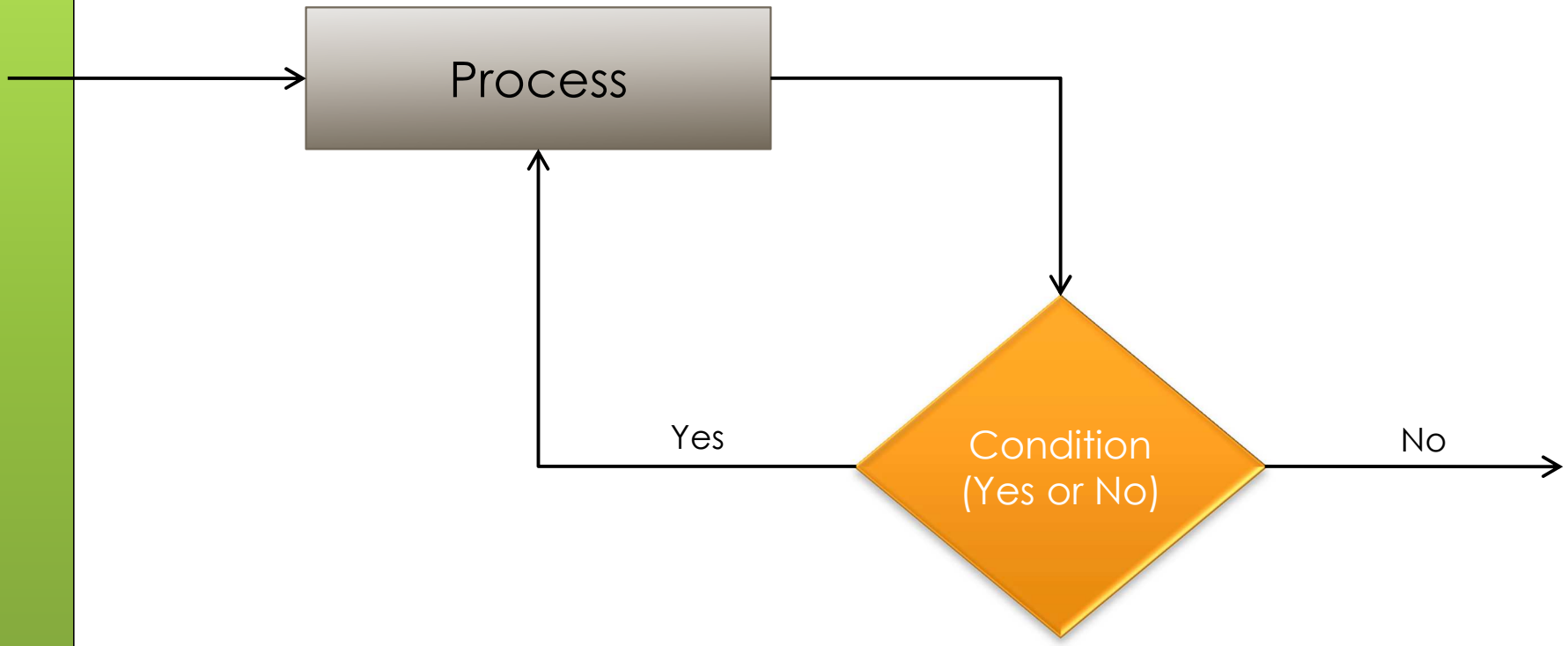
Peanut Butter & Jelly Flow Chart



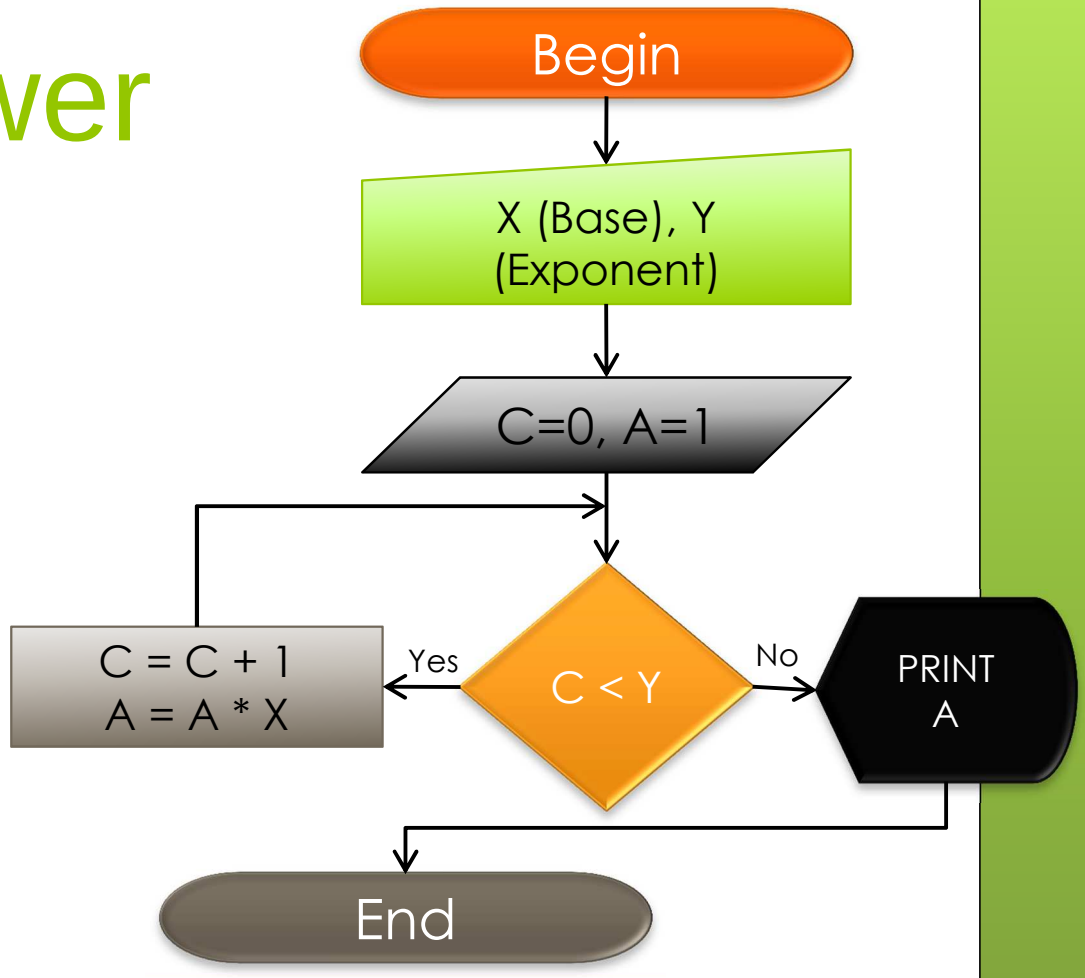
Flow Chart Loops: While / For



Flow Chart Loops: Do While

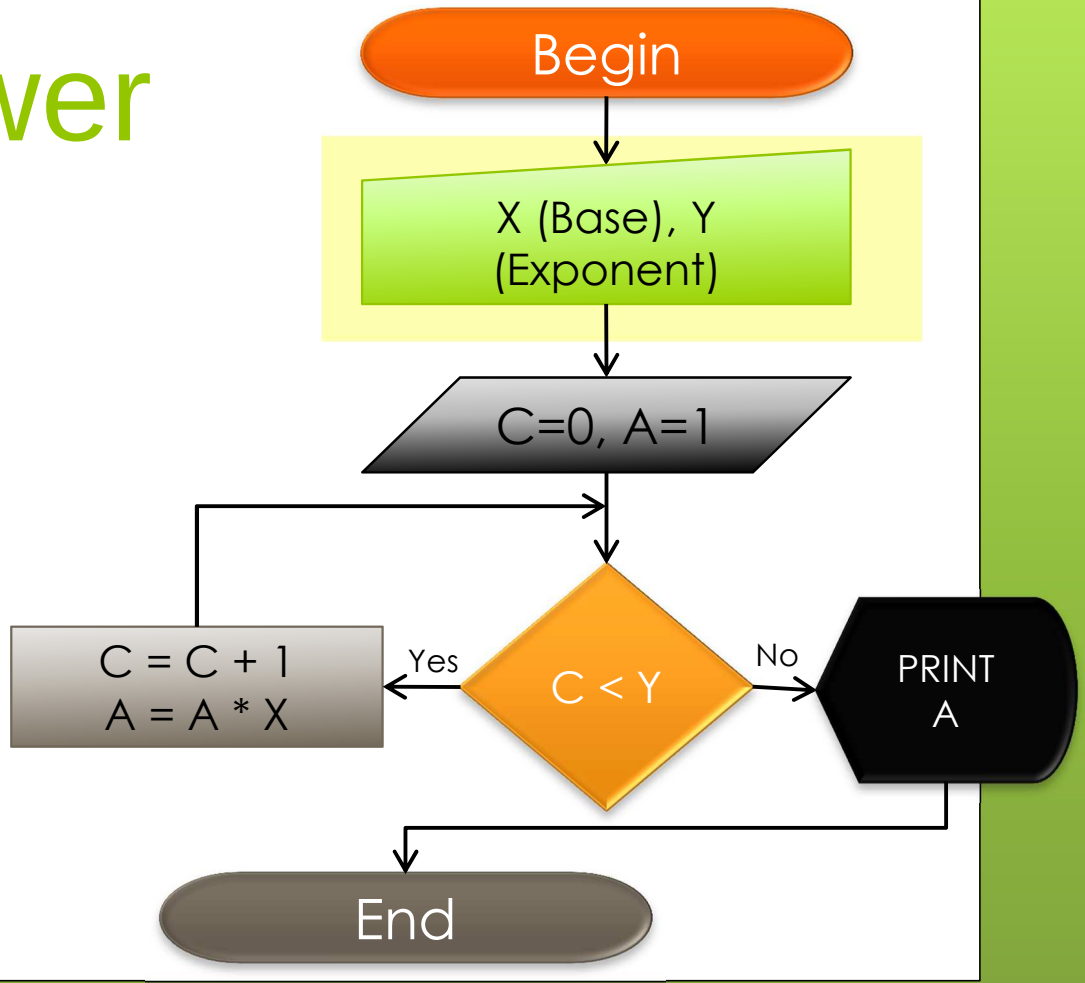


Flow Chart: Power



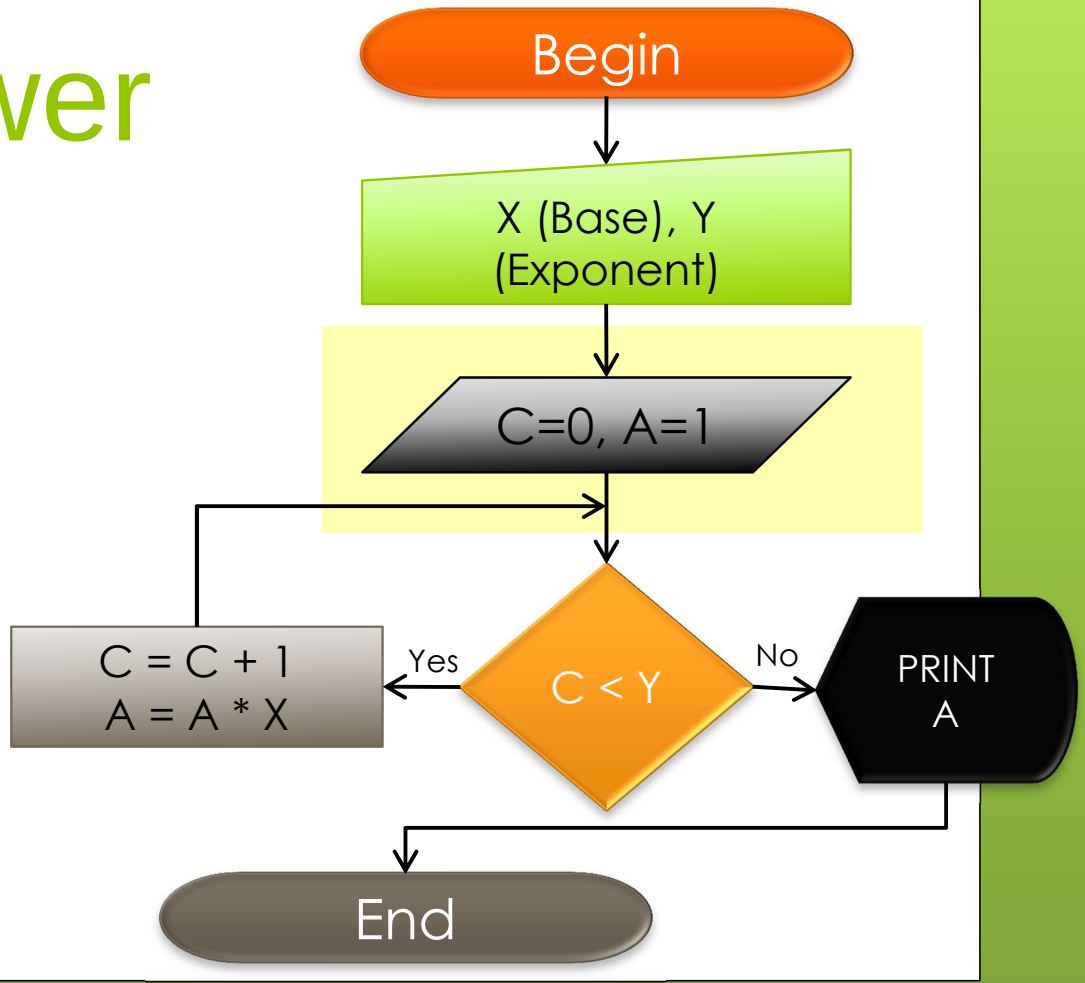
Flow Chart: Power

- X = 3, Y = 4



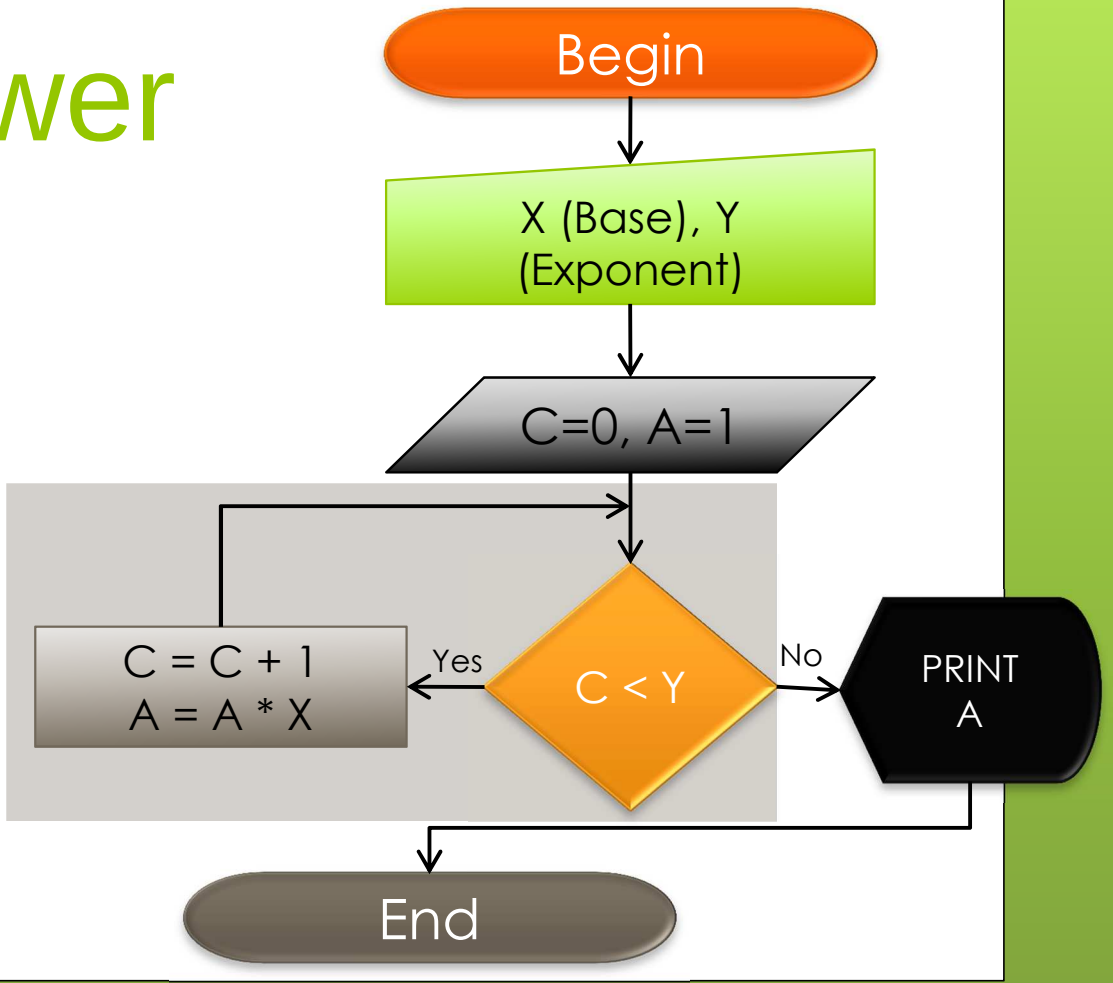
Flow Chart: Power

- X = 3, Y = 4
- C = 0, A = 1



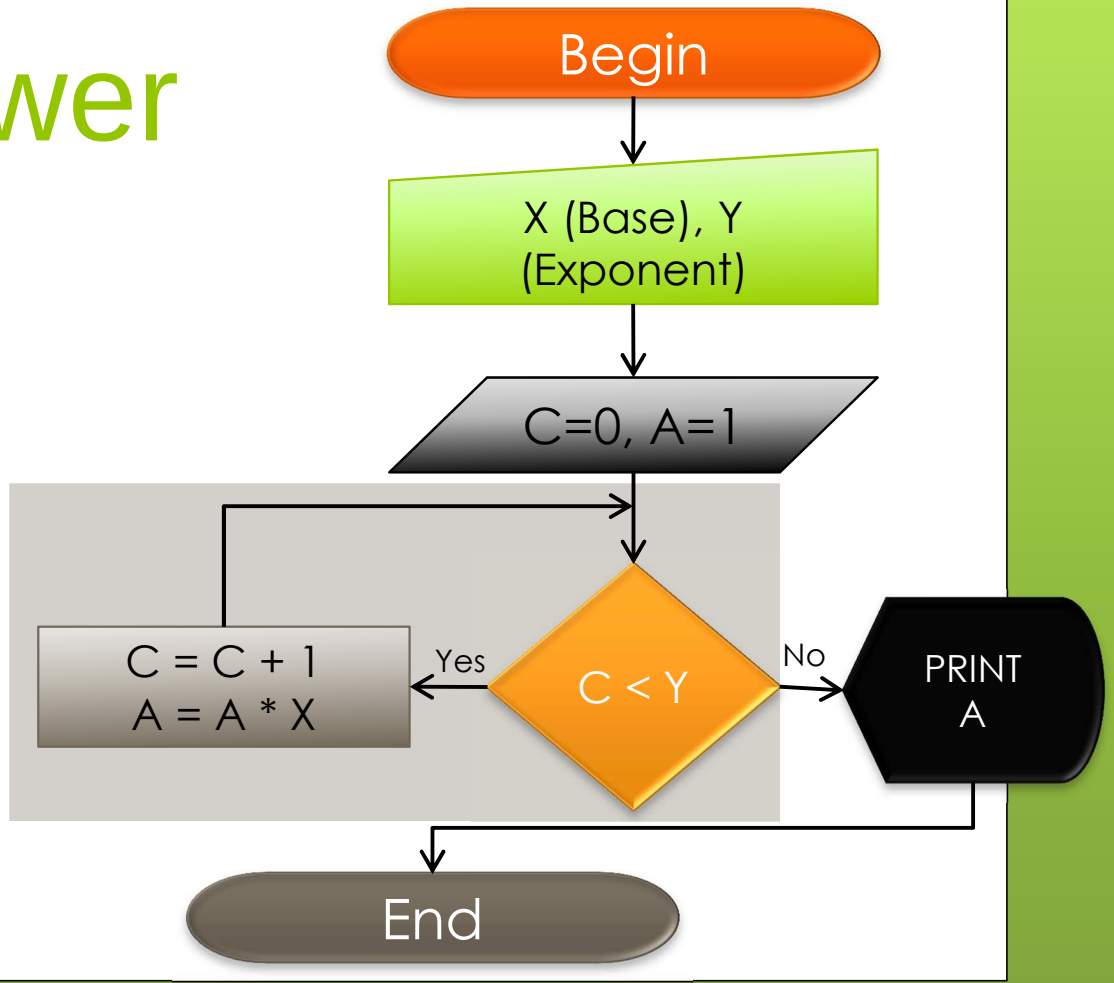
Flow Chart: Power

- X = 3, Y = 4
- C = 1, A = 3
  - Iteration 1
    - C < Y (0 < 4)
      - YES
        - C = C + 1 (C = 0 + 1)
        - A = A * X (A = 1 * 3)



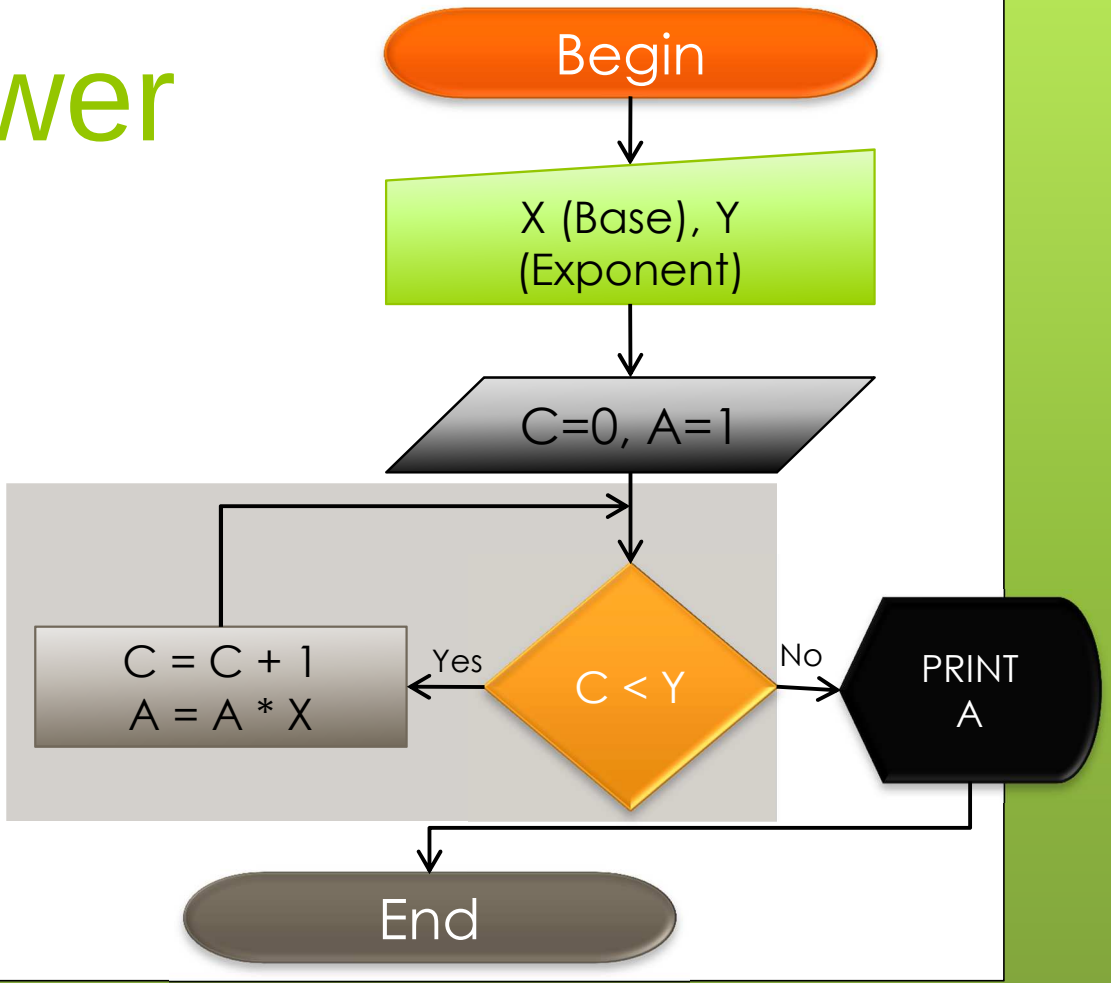
Flow Chart: Power

- X = 3, Y = 4
- C = 2, A = 9
  - Iteration 2
    - C < Y (1 < 4)
      - YES
        - C = C + 1 (C = 1 + 1)
        - A = A * X (A = 3 * 3)



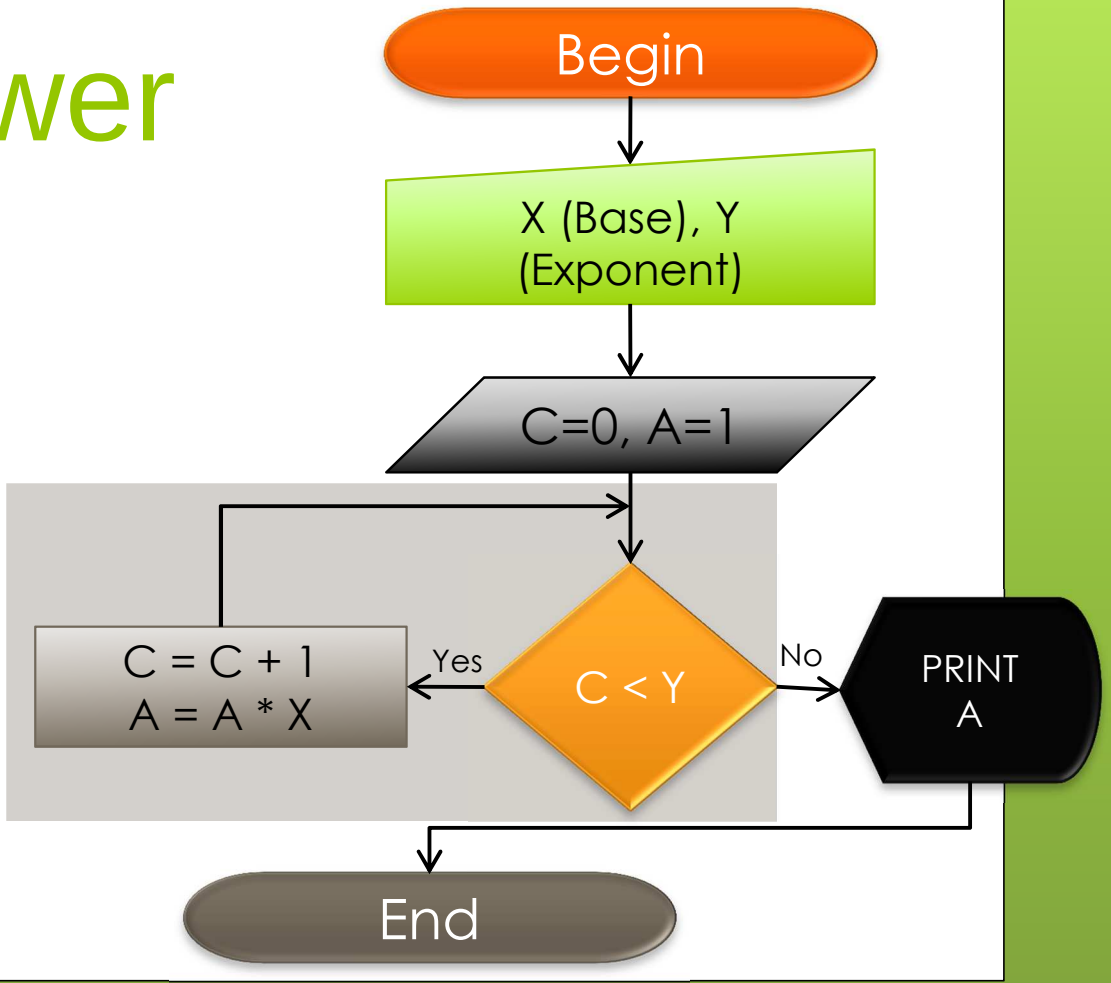
Flow Chart: Power

- X = 3, Y = 4
- C = 3, A = 27
  - Iteration 3
    - C < Y (2 < 4)
      - YES
        - C = C + 1 (C = 2 + 1)
        - A = A * X (A = 9 * 3)



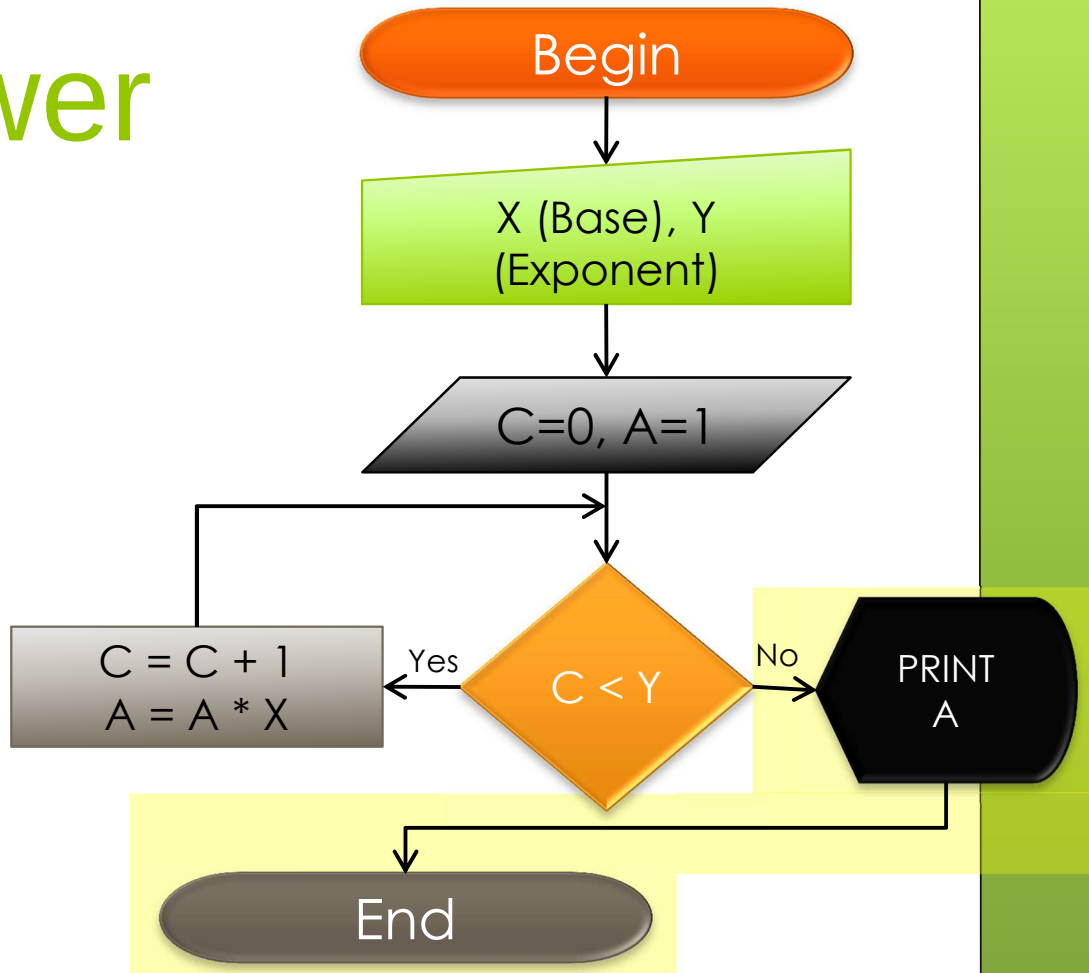
Flow Chart: Power

- X = 3, Y = 4
- C = 4, A = 81
  - Iteration 4
    - C < Y (3 < 4)
      - YES
        - C = C + 1 (C = 3 + 1)
        - A = A * X (A = 27 * 3)



Flow Chart: Power

- X = 3, Y = 4
- C = 4, A = 81
  - Iteration 5
    - C < Y (4 < 4)
      - NO
        - PRINT 81
        - End



The End?