CSC 106: Lab 2

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Some Youtube Videos on Plagiarism

- Youtube video "A Quick Guide to Plagiarism."

Some Youtube Videos on Plagiarism

- Youtube video "A Quick Guide to Plagiarism."
- Youtube video "Avoiding Plagiarism: What Do I Need to Cite."

Some Unacceptable Forms of Referencing

Unacceptable forms of referencing:

Some Unacceptable Forms of Referencing

Unacceptable forms of referencing: references that is too vague. For example:

- Google.com
- Wikipedia
- The Library

Some Unacceptable Forms of Referencing

Unacceptable forms of referencing: web sources without URL:

- "Microsoft clipart page"
- "so and so's home page"

Some Unacceptable Forms of Referencing

Unacceptable forms of referencing: valid websource, but too vague

- http::://www.uvic.ca
- http::://www.nytimes.com

Some Unacceptable Forms of Referencing

Ask yoursef:

> If someone gave me this reference,
> could I use it to *easily* find and verify the information?

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Some Online Resources

- Youtube video "APA Referencing: The Basics."

Some Online Resources

- Youtube video "APA Referencing: The Basics."
- Youtube video: "APA Referencing: Electronic Sources."

Some Online Resources

- Youtube video "APA Referencing: The Basics."
- Youtube video: "APA Referencing: Electronic Sources."
- Youtube video: "MLA Tutorial #2: Basic Citation Format."

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Ways to Describe an Algorithm

Mainly two ways to describe an algorithm

Ways to Describe an Algorithm

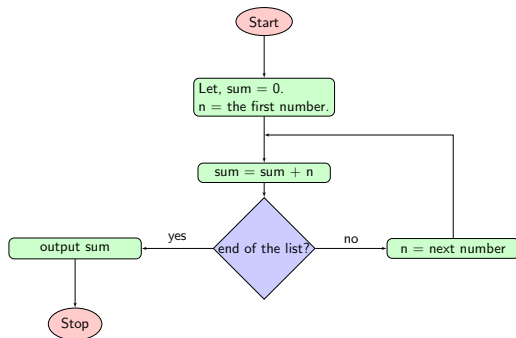| **Algorithm 1** Addition |
| --- |
| **Input:** A list of decimal numbers |
| **Output:** The sum of all the numbers |
| |
| $S \leftarrow 0$ |
| $n \leftarrow$ the first number |
| $S = S + n$ |
| **while** There are more numbers to add **do** |
| $\quad n =$ the next number |
| $\quad S = S + n$ |
| **end while** |
| **return** S |

- Pseudocode

Ways to Describe an Algorithm

- Flowchart

Pseudocode: Control Structures

- Direct Sequencing:

Pseudocode: Control Structures

- Direct Sequencing:

"do A followed by B"

Pseudocode: Control Structures

- Direct Sequencing:

  "do *A* followed by *B*"

- Conditional Branching:

Pseudocode: Control Structures

- Direct Sequencing:

$$\text{``do } A \text{ followed by } B\text{''}$$

- Conditional Branching:

$$\text{``if } Q \text{ then do } A\text{.''}$$

Pseudocode: Control Structures

- Direct Sequencing:

  "do A followed by B"

- Conditional Branching:

  "if Q then do A."
  "if Q then do A otherwise do B."

Pseudocode: Control Structures

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Pseudocode: Control Structures

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- Looping Constructs:

  1. Bounded Iteration:

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  1. Bounded Iteration:

     "do A exactly N times."

Pseudocode: Control Structures

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    2. Conditional Iteration:

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- Direct Sequencing:

$$\text{``do } A \text{ followed by } B\text{''}$$

- Conditional Branching:

$$\text{``if } Q \text{ then do } A\text{.''}$$
$$\text{``if } Q \text{ then do } A \text{ otherwise do } B\text{.''}$$

- Looping Constructs:

  1. Bounded Iteration:

  $$\text{``do } A \text{ exactly } N \text{ times.''}$$

  2. Conditional Iteration:

  $$\text{``repeat } A \text{ until } Q\text{.''}$$

Pseudocode: Control Structures

- Direct Sequencing:

    "do A followed by B"

- Conditional Branching:

    "if Q then do A."
    "if Q then do A otherwise do B."

- Looping Constructs:

    1. Bounded Iteration:

        "do A exactly N times."

    2. Conditional Iteration:

        "repeat A until Q."
        "while Q do A."

Flowcharts

We are going to use only 3 different node types
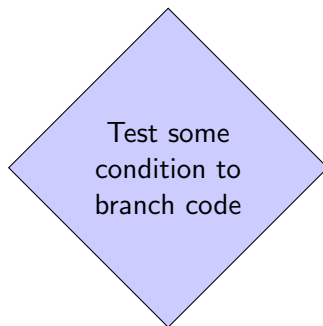
Flowcharts

- Ellipse

Flowcharts

- Rectanle

$$\boxed{\text{Execute instructions}}$$

Flowcharts

- Diamond

Test some condition to branch code

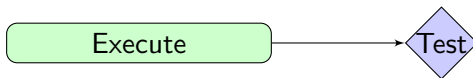# Flowcharts

Flow of execution is denoted by a pointed arrow.

Flowcharts

Making loops in flowcharts: