Logo, company name

Description automatically generatedCSCI102/CBIO202: Introduction to Programming Sheet 01: Flow Chart FALL 2022

# Sheet 01: Flow Chart

# State whether true or false: -

1. The CPU is the "brain" of the computer.
2. Secondary memory is also called RAM.
3. All information that a computer is currently working on is stored in main memory.
4. An algorithm must be written using a programming language.
5. The best way to write a program is to immediately type in some code and then debug it until it works.

# Discussion

Compare and contrast the following pairs of concepts from the chapter:

1. Hardware vs. Software
2. Algorithm vs. Program
3. Programming Language vs. Natural Language
4. High-Level Language vs. Machine Language
5. Interpreter vs. Compiler

Test Your Understanding about Flow charts

1. Draw a flowchart to compute the area of a circle of Radius R.
2. Draw a flow chart of a program that takes two numbers then sum them.
3. Draw a flow chart of a program that computes the maximum of two numbers entered by the user.
4. Draw a flowchart that counts numbers from 1 to 10.
5. Draw a flowchart to enter the name of N students and three marks for each student and print the student name, average mark, and grade.

Table

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1. Draw a flow chart of a program that computes 𝑆 = 1 + 2+. . . +𝑁. Where N is a number entered by the user.
2. Draw a flowchart to find the largest number in a list of numbers.

**Extra question (solved at home and discussed in the next lab):**

**Q1:** Write an algorithm and draw a flowchart to calculate 2^4 without a loop. Repeat solving the question using loops. What do you conclude?