**Take Home: Quiz 4 (15 pts) – Decision Statements and Flowcharts**

**Submit a hard-copy of your solutions in lab this week!**

1. (4 pts) What is a flowchart? Explain.

A flowchart is a type of diagram that represents an algorithm, workflow or process, showing the steps as boxes of various kinds, and their order by connecting them with arrows. This diagrammatic representation illustrates a solution model to a given problem.

1. (6 pts) Draw a *flowchart* for the following problem (no C code is required!):

*Given three numbers: n1, n2, and n3. Find the maximum number.*

Hint: remember a decision is represented by a diamond shape and a process is represented by a rectangular shape.

Scan

n1, n2, n3

Set a variable as the max

Set n1 as the max

Set n3 as the max

If yes

Is n3 greater than the max?

Is n2 greater than the max?

Set n2 as the max

If yes

**Please keep this page separate!**

1. (5 pts) EECS is conducting a study to evaluate the retention rate in the program. The data collected from this survey will be used in this study. Your name and WSU ID will be kept confidential and will not be included in the published results.

**Please complete the following:**

1. Name: Elijah Andrushenko
2. WSU ID Number: 011476324
3. Age: 18
4. Class Standing: (circle one)  **Freshman** Sophomore Junior Senior Other: \_\_\_\_\_\_\_\_
5. Current major: Computer Science

If presently a computer science (CptS) major:

1. How likely are you to switch to a major that is not computer science? (circle one)

1- not at all likely

**2- not sure**

3- somewhat likely

4- very likely

5- already decided to switch

If presently a major other than CptS and EE:

1. Do you plan to become a computer science major?

Yes, I do.

(If **YES**)

1. How likely are you to switch your major to computer science? (circle one)
2. not at all likely
3. not sure
4. somewhat likely
5. very likely
6. **already decided to switch**
7. Are you currently doing minor in computer science?

No, I’m doing it as a major.

(If **NO**)

1. How likely are you to pursue a minor in computer science? (circle one)
2. not at all likely
3. **not sure**
4. somewhat likely
5. very likely
6. already decided to switch
7. What is your reason for taking the present computer science course?

It is required for CPTS majors. I have also heard that learning C makes learning other programming languages much easier.

1. How likely are you to enroll in the next course in the computer science sequence?
2. not at all likely
3. not sure
4. somewhat likely
5. very likely
6. **already decided to enroll**