

CSE 1310 – Prelab 03

True or False(5 points):

1. ____ % can be applied to real numbers.
2. ____ & when used in front of a variable returns address of that variable (for example: scanf(“%d”,&a);).
3. ____ Reserved words can be redefined by the programmer.
4. ____ In testing phase you develop simple test cases.
5. ____ scanf is a reserved word.

Fill in the blank(4 points):

1. Program execution begins with _____ function.
2. The _____ directive gives a program access to a library.
3. Three standard data types are _____, _____, and _____.
4. _____ escape sequence represents a new line.

Short Answers (6 points):

1. Which formalized notation symbol is used to represent the following:
 - a. Repetitions
 - b. Processing state
 - c. Decision state
 - d. Functions
2. Explain modular design concept.
3. In which phase are we allowed to enhance the functionality of the program?
4. What is the difference between = and == ?
5. What are the two most common preprocessor directives?
6. Which of the following identifiers are (a) C reserved words, (b) standard identifiers, (c) conventionally used as constant macro names, (d) other valid identifiers, and (e) invalid identifiers?

1) void 2)MAX_ENTRIES 3) double 4) time 5) G

- 6) Sue's
- 7) return
- 8) printf
- 9) xyz123
- 10) part#2
- 11) "char"
- 12) #insert
- 13) this_is_a_long_one

Problem(10 points):

A farmer owns a field, which is rectangular in shape. At the center of this field is situated a rectangular shaped house belonging to the farmer. You will need to calculate the area of the rest of the region that lies between the house and the boundaries of the field.

Work out the design and analysis for solving this problem. Write the pseudocode logic for this problem and draw a graphical representation of your design using a flowchart diagram.

1. What is the expected output of this program?
2. What are the inputs to the program?
3. Flowchart:
4. Pseudocode: