Programming with C Language

Tutorial 2

1. How do you write comments in a c program? What is the purpose of comments in a program?

2. Which is the function that is essential in a C program?

3. What is the purpose of 'scanf' ?

4. Is 'standard c' a case sensitive language?

5. Determine which of the following are valid identifiers. If invalid, explain why.

(a) record1   (e) $tax   (h) name-and-address

(b) 1record   (f) name   (i) name_and_address

(c) file-3   (g) name and address   (j) 123 - 45 - 6789

(d) return

6. State whether each of the following is true or false. If false, explain why.

   a) Function printf always begins printing at the beginning of a new line.

   b) Comments cause the computer to print the text enclosed between /* and */ on the screen
   when the program is executed.

   c) The escape sequence \n when used in a printf format control string causes the cursor to
   position to the beginning of the next line on the screen.

   d) All variables must be defined before they're used.

   e) All variables must be given a type when they're defined.

   f) C considers the variables, number and NuMbEr to be identical.

   g) A program that prints three lines of output must contain three printf statements.

7. What does the following code print?

   printf("*\n**\n***\n****\n*****\n");

8. Identify and correct the errors in each of the following statements. (Note: There may be more than one error per statement.)

        a) scanf("d", value);

        b) printf("The product of %d and %d is %d"\n, x, y);

        c) Scanf("%d", anInteger);

        d) printf("Remainder of %d divided by %d is\n", x, y, x % y);

        e) print("The sum is %d\n," x + y);

        f) Printf("The value you entered is: %d\n, &value);

9. What, if anything, prints when each of the following statements is performed? If nothing prints, then answer "Nothing." Assume x = 2 and y = 3 .

        a) printf("%d", x);

        b) printf("%d", x + x);

        c) printf("x=");

        d) printf("x=%d", x);

        e) printf("%d = %d", x + y, y + x);

        f) z = x + y;

        g) scanf("%d%d", &x, &y);

        h) /* printf("x + y = %d", x + y); */

        i) printf("\n");

10. State which of the following are true and which are false. If false, explain your answer.

        a) C operators are evaluated from left to right.

        b) The following are all valid variable names: _under_bar_ , m928134 , t5 , j7 , her_sales , his_account_total , a , b , c , z , z2 .

        c) The statement printf("a = 5;"); is a typical example of an assignment statement.

        d) A valid arithmetic expression containing no parentheses is evaluated from left to right.

        e) The following are all invalid variable names: 3g , 87 , 67h2 , h22 , 2h