

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`