MCQs on Conditional Statements & Loops - C Programming

objective questions with answers

1.

Assume that i, j and k are integer variables and their values are 8, 5 and 0 respectively. What will be the values of variables i and k after executing the following expression?

- $k = (j > 5) ? (i < 5) ? i - j : j - i : k - j;$
- $i = (k) ? (i) ? (j) ? : (i) : (k);$

What will be the result of execution?

[A] -3 and 3
[B] 3 and -5
[C] 3 and -3
[D] -5 and 3

Answer & Explanation

Answer: Option [D]

Given that the values of i, j and k are 8, 5 and 0 respectively. The first statement $j > 5$ is not executed because $j = 5$ and $i < 5$ is also not executed. So the program evaluate $k - j$, which is, $0 - 5 = -5$. So after execution of first expression
the values are 8, 5 and -5 respectively.

In the second statement the values of k, i are non zero. so it is true for both. So the values of i, j and k are 3, 5 and -5

2.

Find the error in the following program:

```c
main()
{
    int m;
    char g;
    switch(m)
    {
        case 3: grade="P":break;
        case 2: grade="Q":break;
        case 1: grade="R":break;
        default: grade="S":break;
    }
```
What will be the output of the program?

[A] Undefined symbol "grade"

[B] switch statement cannot have more than three labels

[C] case label cannot be numbers

[D] none of these

Answer & Explanation

**Answer: Option [A]**

3.

Data type of the controlling statement of a SWITCH statement cannot of the type:

[A] int

[B] char

[C] short

[D] float

Answer & Explanation

**Answer: Option [D]**

The SWITCH statement is a conditional statement. Using this statement we handle number of cases simultaneously. Float data type is not allowed in SWITCH statement.

4.

How long the following loop runs?

- for(x=0;x<3;x++)

[A] Three times

[B] Four times

[C] Forever

[D] Never

Answer & Explanation

**Answer: Option [D]**
The first statement of a for loop is initialize the loop counter, second is conditional statement and the third one is increment/decrement of the loop counter.

In the given expression the second statement is an assignment statement instead of condition.

So the for loop never execute.

5.

The CONTINUE statement cannot be used with

[A] for
[B] switch
[C] do
[D] while

Answer & Explanation

**Answer: Option [B]**

The CONTINUE Keyword skips the code and immediately passes control to the beginning of the statement for next iteration.