C MCQs - 6

Topics : C
Written on March 20, 2024

51. Which of the following is true regarding the `sizeof` operator in C?

    a) It is a preprocessor directive
    b) It returns the size of a variable in bits
    c) It can be used with any data type including user-defined types
    d) It can be used to determine the size of dynamic memory allocations

    Answer: c) It can be used with any data type including user-defined types

52. What will be the output of the following code?

    ```c
    #include <stdio.h>
    int main() {
        int arr[5] = {1, 2, 3, 4, 5};
        printf("%d\n", arr[5]);
        return 0;
    }
    ```

    a) 1
    b) 5
    c) Compiler error
    d) Undefined behavior

    Answer: d) Undefined behavior

53. In C, what is the purpose of the `continue` statement?

    a) To terminate the program
    b) To exit the loop and transfer control to the loop's condition check
    c) To skip the remaining code in the loop and continue with the next iteration
    d) To jump to a labeled statement

    Answer: c) To skip the remaining code in the loop and continue with the next iteration

54. Which function is used to compare two strings in C?

a) strcomp()
b) strcmp()
c) strcompare()
d) compare()

Answer: b) strcmp()

55. What will be the output of the following code?

```c
#include <stdio.h>
int main() {
    int x = 5, y = 10;
    if (x = y)
        printf("x is equal to y\n");
    else
        printf("x is not equal to y\n");
    return 0;
}
```

a) x is equal to y
b) x is not equal to y
c) Compiler error
d) No output

Answer: a) x is equal to y

56. Which header file is required to use the pow() function in C?

a) <stdio.h>
b) <stdlib.h>
c) <math.h>
d) <ctype.h>

Answer: c) <math.h>

57. What will be the output of the following code?

```c
#include <stdio.h>
int main() {
    int x = 5, y = 10;
    x ^= y;
    y ^= x;
    x ^= y;
    printf("x = %d, y = %d\n", x, y);
    return 0;
}
```

a) x = 5, y = 10

b) x = 10, y = 5
c) x = 0, y = 0
d) Compiler error

Answer: b) x = 10, y = 5

58. What does the `isdigit()` function in C do?

a) Checks if a character is a digit
b) Converts a character to its lowercase equivalent
c) Converts a character to its uppercase equivalent
d) Checks if a character is a whitespace character

Answer: a) Checks if a character is a digit

59. What will be the output of the following code?

```c
#include <stdio.h>
int main() {
    int x = 5;
    printf("%d\n", x++);
    printf("%d\n", ++x);
    return 0;
}
```

a) 5, 7
b) 5, 6
c) 6, 6
d) 6, 7

Answer: b) 5, 6

60. In C, what is the purpose of the `goto` statement?

a) To exit a loop
b) To transfer control to a labeled statement
c) To skip the remaining code in a loop and continue with the next iteration
d) To terminate the program

Answer: b) To transfer control to a labeled statement