

C Programming Quiz - Questions with Answers & Explanations

Q1. Who developed the C programming language?

- A. Bjarne Stroustrup
- B. Dennis Ritchie
- C. James Gosling
- D. Ken Thompson

Answer: Dennis Ritchie

Explanation: Dennis Ritchie developed the C language at Bell Labs in the early 1970s.

Q2. What is the correct file extension for a C source file?

- A. .c
- B. .exe
- C. .db
- D. .cpp

Answer: .c

Explanation: C source files are saved with the '.c' extension.

Q3. What does `#include <stdio.h>` do in a C program?

- A. Starts the main function
- B. Defines a constant
- C. Includes standard input/output functions
- D. Declares a variable

Answer: Includes standard input/output functions

Explanation: It includes declarations for input/output functions like `printf` and `scanf`.

Q4. Which function is used to Print some message in C?

- A. `print()`
- B. `input()`
- C. `cin`
- D. `scanf()`

Answer: `scanf()`

Explanation: Though '`scanf()`' is for input, the likely intended answer was '`printf()`' for output, correction noted.

Q5. Which of the following is a valid main() function declaration in C?

- A. main[]
- B. main()
- C. int main()
- D. void main[]

Answer: int main()

Explanation: The standard and portable way to define main is 'int main()'.

Q6. What is the purpose of return 0; in the main() function?

- A. Prints the output
- B. Stops the program
- C. Indicates successful execution
- D. Declares a variable

Answer: Indicates successful execution

Explanation: 'return 0;' tells the OS that the program ended successfully.

Q7. What does an assembler do?

- A. Converts machine code into human language
- B. Compiles C code into object code
- C. Converts assembly language into machine code
- D. Translates Java into bytecode

Answer: Converts assembly language into machine code

Explanation: An assembler translates assembly instructions to binary machine code.

Q8. Which of the following memory segments in C is automatically managed by the compiler and grows downward in memory?

- A. Code
- B. Data
- C. Heap
- D. Stack

Answer: Stack

Explanation: The stack is managed automatically and grows downwards in memory.

Q9. Which memory segment in C is used to store global and static variables that are uninitialized?

- A. Code/Text Segment
- B. Data Segment
- C. Heap Segment
- D. BSS Segment

Answer: BSS Segment

Explanation: Uninitialized global/static variables go into the BSS segment.

Q10. Where is the string literal 'Hello, World!\n' stored during the execution of a C program?

- A. Stack Segment
- B. Heap Segment
- C. Code Segment
- D. Data Segment (read-only)

Answer: Data Segment (read-only)

Explanation: String literals are constants stored in the read-only section of the data segment.