#include <stdio.h> // 1. Header file inclusion

int main() { // 2. Main function starts here

printf("Hello, World!\n"); // 3. Print statement

return 0; // 4. End of the program

}

**Step-by-Step Explanation:**

**1. #include <stdio.h>**

* This is a **preprocessor directive**.
* The <stdio.h> header file stands for "Standard Input/Output". It contains built-in functions for input/output operations, like printf for printing text.
* By including this file, we gain access to those functions.

**2. int main()**

* **main()** is the starting point of any C program.
* When the program runs, execution begins from the main() function.
* The int before main means the function will return an **integer value** (more on this later).

**3. printf("Hello, World!\n");**

* **printf** is a function used to display output on the screen.
* The text inside the double quotes "Hello, World!\n" will be printed exactly as it appears.
  + The \n is a **newline character**, which moves the cursor to the next line after printing.
* This line is the most important part of the program because it performs the main task: printing "Hello, World!".

**4. return 0;**

* The main() function returns a value to the operating system when the program ends.
* **0** usually means the program executed successfully.
* This line is optional in newer compilers, but it’s a good habit to include it.