PRACTICAL NO:-4

Aim:- To explain compile time errors and runtime errors.

1. Compile Time Errors

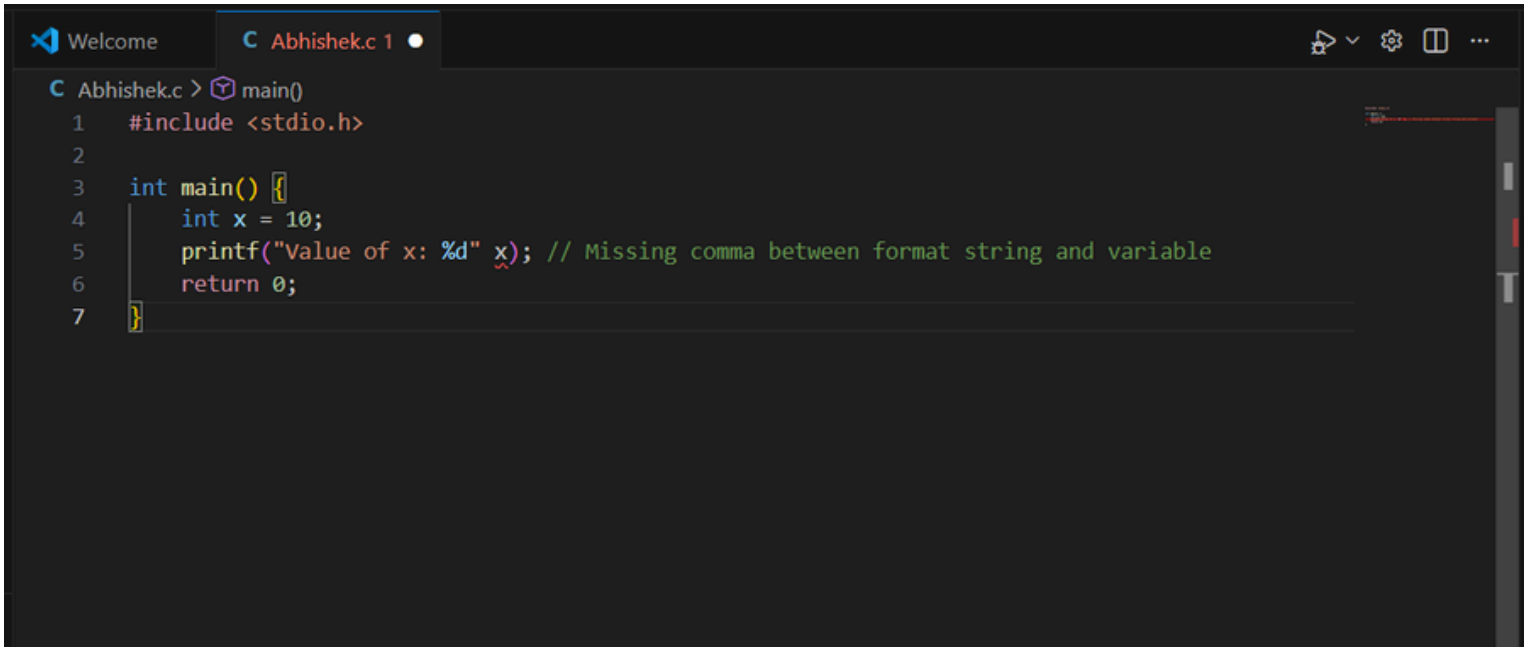
- These errors occur when the program is being compiled.
- The compiler detects these errors before the program is executed.
- Common examples include:
- Syntax errors
- Missing semicolons
- Undeclared variables
- Type mismatches
- Missing brackets, etc.
- The program does not run until all compile time errors are corrected.

2. Run Time Errors

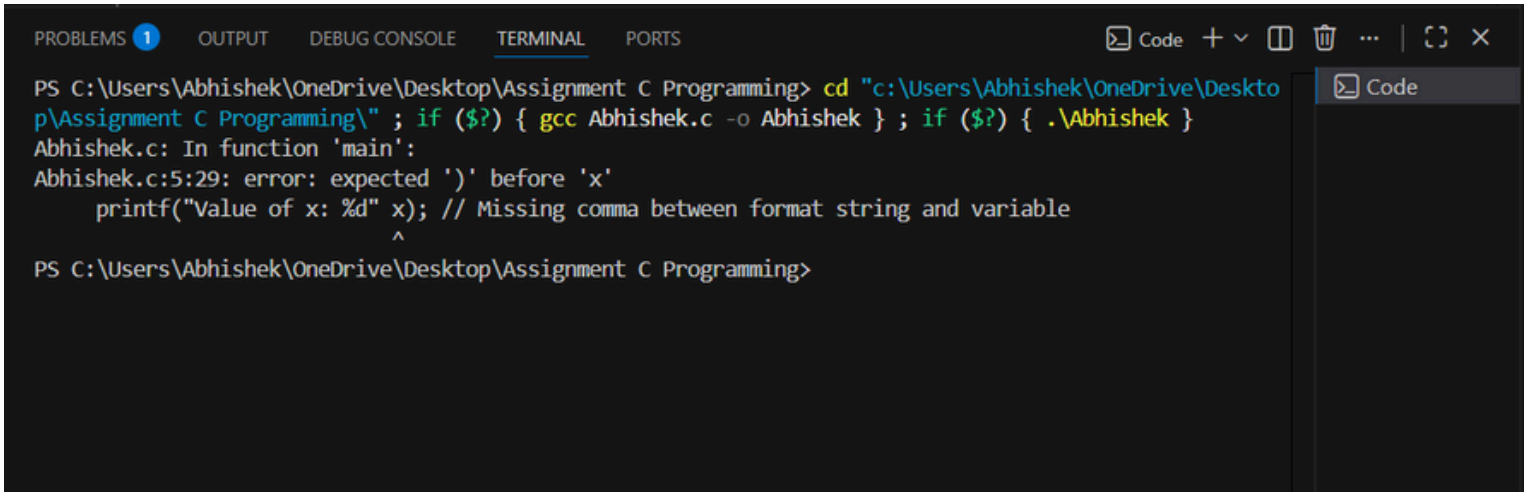
- These errors occur while the program is running (after successful compilation).
- They are usually caused by:
- Invalid input
- Division by zero
- File handling issues
- Memory-related issues
- The program may compile successfully but can crash during execution due to runtime errors.

Example of Compile Time Error

- **CODE :-**



- **OUTPUT :-**

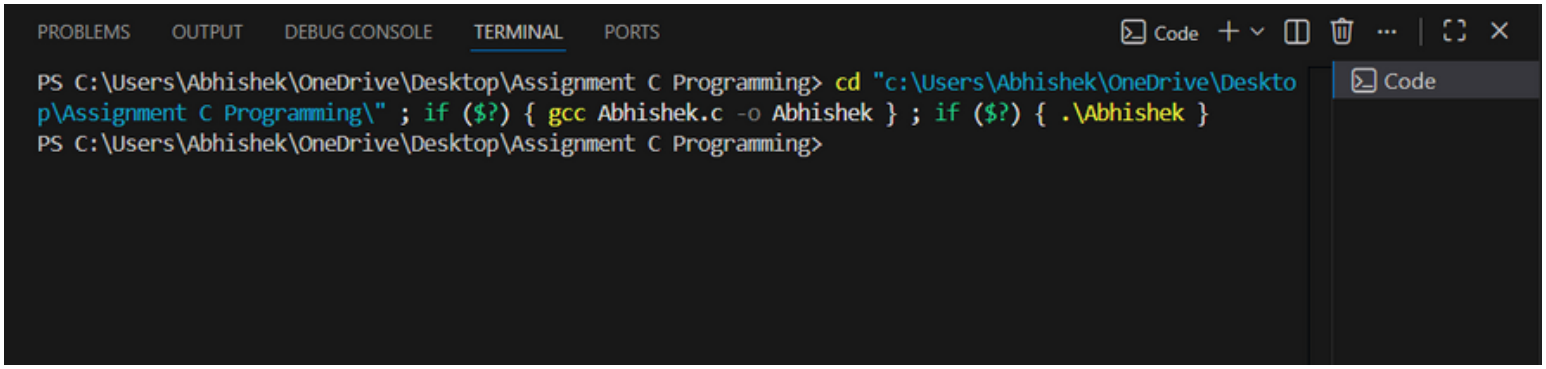


- **Explanation: - The error occurs because the printf statement is written incorrectly. Since the syntax is wrong, the compiler stops and refuses to generate an executable program.**

Example of Run Time Error

- **CODE :-**

- **OUTPUT :-**



- **Explanation:- The code is syntactically correct, so it compiles successfully.**

However, dividing a number by zero causes a runtime error, leading to abnormal termination.