

# Configuring Your Compiler

## Build Configurations

A **build configuration** is a collection of project settings that determine how your IDE will build a project. These settings include:

- The name of the executable.
- The directories the IDE will search through for files.
- How much of the project to compile.

There are two common build configurations: **debug** and **release**.

## Debug Configuration

The debug configuration is used while writing and testing your programs. It:

- Includes debugging information, making it easier to identify and resolve issues in your program.
- Produces larger and slower executables due to the extra debug information.

## Release Configuration

The release configuration is designed for deploying a program to the public. It:

- Optimizes the program for size and performance.
- Does not include extra debugging information, resulting in smaller and faster executables.

## Best Practices

The best practice is to:

- Use the **debug configuration** while developing and testing a program.
- Switch to the **release configuration** when deploying the program for production use.