

Tutorials

Each tutorial in this section shows you how to implement a simple application using protocol buffers in your favourite language, introducing you to the language's protocol buffer API as well as showing you the basics of creating and using [.proto files](https://developers.google.com/protocol-buffers/docs/proto?hl=zh-cn) (<https://developers.google.com/protocol-buffers/docs/proto?hl=zh-cn>). The complete sample code for each application is also provided.

The tutorials don't assume that you know anything about protocol buffers, but do assume that you are comfortable writing code in your chosen language, including using file I/O.

- [C++ Tutorial](https://developers.google.com/protocol-buffers/docs/cpptutorial?hl=zh-cn) (<https://developers.google.com/protocol-buffers/docs/cpptutorial?hl=zh-cn>)
- [C# Tutorial](https://developers.google.com/protocol-buffers/docs/csharp tutorial?hl=zh-cn) (<https://developers.google.com/protocol-buffers/docs/csharp tutorial?hl=zh-cn>)
- [Dart Tutorial](https://developers.google.com/protocol-buffers/docs/darttutorial?hl=zh-cn) (<https://developers.google.com/protocol-buffers/docs/darttutorial?hl=zh-cn>)
- [Go Tutorial](https://developers.google.com/protocol-buffers/docs/gotutorial?hl=zh-cn) (<https://developers.google.com/protocol-buffers/docs/gotutorial?hl=zh-cn>)
- [Java Tutorial](https://developers.google.com/protocol-buffers/docs/javatutorial?hl=zh-cn) (<https://developers.google.com/protocol-buffers/docs/javatutorial?hl=zh-cn>)
- [Python Tutorial](https://developers.google.com/protocol-buffers/docs/pythontutorial?hl=zh-cn) (<https://developers.google.com/protocol-buffers/docs/pythontutorial?hl=zh-cn>)

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