

Sr No	Software required (With version)	Free/Proprietary	If proprietary, can code testing be performed using a trial version	If proprietary, then cost of the software	Download links to the software	Hardware specifications	OS required
1	Go v1.12	Free	NA	NA	https://golang.org/	System with 4GB RAM	macOS, Linux, Windows, FreeBSD
2	Visual Studio Code v1.35	Free	NA	NA	https://code.visualstudio.com/	System with 4GB RAM	macOS, Linux, Windows
3	OpenSSL v1.1.1b	Free	NA	NA	https://www.openssl.org/	System with 4GB RAM	macOS, Linux, Windows
4	Protobuf v3.8.0	Free	NA	NA	https://github.com/google/protobuf	System with 4GB RAM	macOS, Linux, Windows
5	Build Essentials (GCC v8.3.0)	Free	NA	NA	-	System with 4GB RAM	macOS, Linux, Windows

The detailed installation steps are as follows:

1. Go v1.12:

1. Download the latest version of Go from <https://golang.org/dl/>.
2. Extract it with `tar -C /usr/local -xzf go$VERSION.$OS-$ARCH.tar.gz`.
3. Add it to PATH with `export PATH=$PATH:/usr/local/go/bin`.
4. Set the GOPATH variable with `export GOPATH=~/go`.
5. Add GOPATH binaries to the PATH with `export PATH=$PATH:$GOPATH/bin`.
6. Ensure that Go is installed with go version.
7. Add the export statements to your `.bashrc` file.

2. Visual Studio Code

1. Download the latest installer from <https://code.visualstudio.com/Download>.
2. Run the installer.

3. OpenSSL
 1. It should be installed in your Linux distribution.
 2. If not, run `sudo apt install openssl`.
4. Protobuf
 1. Download the latest release from <https://github.com/protocolbuffers/protobuf/releases>.
 2. Unzip this file.
 3. Update the environment variable `PATH` to include the path to the `protoc` binary file.
 4. Install the Go gRPC package with the command `go get -u google.golang.org/grpc`.
5. Build essentials
 1. Run `sudo apt install build-essential`.