```
 1 CC = gcc
 2 CFLAGS = -Wall -Wextra -std=c99
 3 BIN = electrotest-standalone
 4
 5 all: $(BIN)
 6 $(BIN): electrotest-standalone.c
 7         $(CC) $(CFLAGS) electrotest-standalone.c -o $(BIN)
 8
 9 install:
10         install -d $(DESTDIR)/usr/bin
11         install -m 755 $(BIN) $(DESTDIR)/usr/bin/
12
13 clean:
14         rm -f $(BIN)
15
```

Här skapade jag en enkel Makefile. Jag skapade också en ny mapp/directory i min linUM1_labb9 mapp som jag kallade för "electrotest-standalone-1.0". Man va tvungen att lägga "-1.0" i namnet för att debmake skulle funka.

```
adamsirrety@ubuntu2:~/Linux1/linUM1_labb9$ tar -czvf electrotest-standalone-1.0.tar.gz
lone-1.0/
electrotest-standalone-1.0/
electrotest-standalone-1.0/electrotest-standalone.c
electrotest-standalone-1.0/Makefile
adamsirrety@ubuntu2:~/Linux1/linUM1_labb9$ debmake
I: set parameters
I: sanity check of parameters
E: invalid parent directory for setting package/version: linUM1_labb9
E: rename parent directory to "package-version".
adamsirrety@ubuntu2:~/Linux1/linUM1_labb9$ cd electrotest-standalone-1.0
```
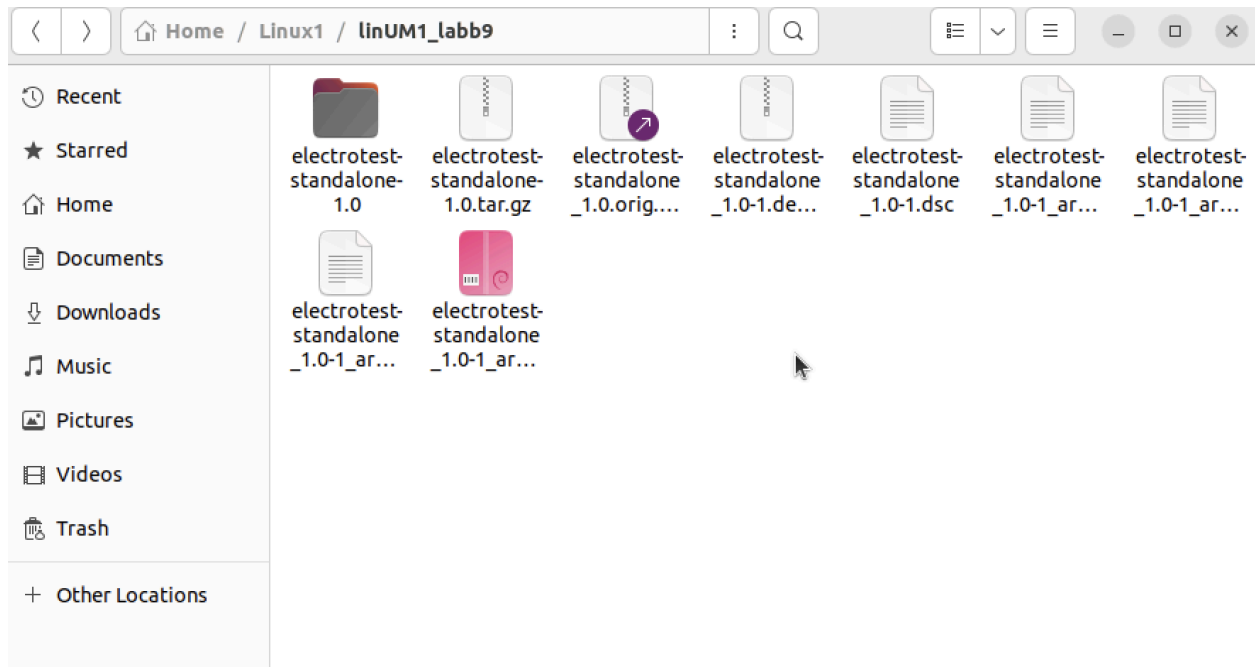
Här körde jag "debmake" kommandot:

```
adamsirrety@ubuntu2:~/Linux1/linUM1_labb9/electrotest-standalone-1.0$ debmake
I: set parameters
I: sanity check of parameters
I: pkg="electrotest-standalone", ver="1.0", rev="1"
I: *** start packaging in "electrotest-standalone-1.0". ***
I: provide electrotest-standalone_1.0.orig.tar.gz for non-native Debian package
I: pwd = "/home/adamsirrety/Linux1/linUM1_labb9"
I: $ ln -sf electrotest-standalone-1.0.tar.gz electrotest-standalone_1.0.orig.tar.gz
I: pwd = "/home/adamsirrety/Linux1/linUM1_labb9/electrotest-standalone-1.0"
I: parse binary package settings:
I: binary package=electrotest-standalone Type=bin / Arch=any M-A=foreign
I: analyze the source tree
I: build_type = make
I: scan source for copyright+license text and file extensions
I: 100 %, ext = c
I: check_all_licenses
I: ..
I: check_all_licenses completed for 2 files.
I: bunch_all_licenses
I: format_all_licenses
I: make debian/* template files
I: single binary package
I: debmake -x "1" ...
I: creating => debian/control
I: creating => debian/copyright
I: substituting => /usr/share/debmake/extra0/changelog
I: creating => debian/changelog
I: substituting => /usr/share/debmake/extra0/rules
I: creating => debian/rules
I: substituting => /usr/share/debmake/extra1/README.Debian
I: creating => debian/README.Debian
I: substituting => /usr/share/debmake/extra1/watch
I: creating => debian/watch
I: substituting => /usr/share/debmake/extra1source/format
I: creating => debian/source/format
I: substituting => /usr/share/debmake/extra1source/local-options
I: creating => debian/source/local-options
I: substituting => /usr/share/debmake/extra1patches/series
I: creating => debian/patches/series
I: run "debmake -x2" to get more template files
I: $ wrap-and-sort
adamsirrety@ubuntu2:~/Linux1/linUM1_labb9/electrotest-standalone-1.0$
```

Efter debmake körde jag "export DEB_BUILD_OPTIONS="noddebs" && debuild -us -uc" och då skapades alla filer efter "electrotest-standalone-1.0" mappen samt en mapp som heter "install"

inuti "electrotest-standalone-1.0" mappen som innehåller "electrotest" programmet.

Lintian version:
adamsirrety@ubuntu2:~/Linux1/linUM1_labb9/electrotest-standalone-1.0$ lintian -V
Lintian v2.114.0ubuntu1.4.

Jag fick dessa lintian errorsarna och varningarna:

```
adamsirrety@ubuntu2:~/Linux1/linUM1_labb9/electrotest-standalone-1.0$ lintian
../electrotest-standalone_1.0-1_arm64.changes
E: electrotest-standalone: bogus-mail-host-in-debian-changelog Adam <> version 1.0-1 (line
1)
E: electrotest-standalone: changelog-is-dh_make-template
E: electrotest-standalone source: malformed-contact Maintainer Adam <>
E: electrotest-standalone: malformed-contact Maintainer Adam <>
E: electrotest-standalone changes: malformed-contact Changed-By Adam <>
E: electrotest-standalone changes: malformed-contact Maintainer Adam <>
E: electrotest-standalone: section-is-dh_make-template
W: electrotest-standalone source: bad-homepage <insert the upstream URL, if relevant>
W: electrotest-standalone: bad-homepage <insert the upstream URL, if relevant>
W: electrotest-standalone: copyright-has-url-from-dh_make-boilerplate
W: electrotest-standalone: copyright-without-copyright-notice
W: electrotest-standalone: file-in-unusual-dir electrotest-standalone
W: electrotest-standalone source: file-without-copyright-information debian/README.Debian
[debian/copyright]
W: electrotest-standalone source: file-without-copyright-information debian/changelog
[debian/copyright]
W: electrotest-standalone source: file-without-copyright-information debian/control
[debian/copyright]
W: electrotest-standalone source: file-without-copyright-information ... use
```

```
--no-tag-display-limit to see all (or pipe to a file/program)
W: electrotest-standalone: initial-upload-closes-no-bugs
W: electrotest-standalone source: missing-license-paragraph-in-dep5-copyright
__no_copyright_nor_license__ [debian/copyright:11]
W: electrotest-standalone: readme-debian-contains-debmake-template
W: electrotest-standalone source: superfluous-clutter-in-homepage <insert the upstream URL,
if relevant>
W: electrotest-standalone: superfluous-clutter-in-homepage <insert the upstream URL, if
relevant>
W: electrotest-standalone: wrong-bug-number-in-closes #nnnn in the installed changelog (line
3)


W: electrotest-standalone source: ambiguous-paragraph-in-dep5-copyright
[debian/copyright:21]
W: electrotest-standalone: initial-upload-closes-no-bugs
W: electrotest-standalone source: missing-field-in-dep5-copyright Copyright
[debian/copyright:8]
W: electrotest-standalone source: missing-field-in-dep5-copyright License [debian/copyright:8]
W: electrotest-standalone source: missing-license-text-in-dep5-copyright LAB_9
[debian/copyright:22]
W: electrotest-standalone: no-manual-page usr/bin/electrotest-standalone
```

```
adamsirrety@ubuntu2:~/Linux1/linUM1_labb9/electrotest-standalone-1.0$ lintian-explain-tags bogus-mail-host-in-debian-changelog
N:
E: bogus-mail-host-in-debian-changelog
N:
N:    The changelog file contains an invalid email address: the domain needs at least one dot. This looks like a mistake.
N:
N:    Visibility: error
N:    Show-Always: no
N:    Check: debian/changelog
N:    Renamed from: debian-changelog-file-contains-invalid-email-address
N:
```

Jag körde "lintian-explain-tags bogus-mail-host-in-debian-changelog" och då visade den mig
vad och var jag skulle fixa. För att fixa detta gick jag in i changelog filen i debian mappen
(debian/changelog) och la in min email i "<>" efter mitt namn: "-- Adam
<adamsirrety@gmail.com> Sun, 26 May 2024 13:45:33 +0000". Jag gjorde detta för varje error
och varning (förutom den som man kunde ignorera). Efter ändringarna var man tvungen att göra
en commit (vilket tog mig en väldigt lång tid att inse) men kommandot "dpkg-source --commit".
Det var lite konstigt dock då det ibland funkade utand de kommandot och ibland inte, jag ska
kolla djupare på hur det funkar. Efter min commit körde jag "export
DEB_BUILD_OPTIONS="noddebs" && debuild -us -uc" kommandot igen så att alla ändringarna
var på plats. Jag skapade också en "manpages" mapp som innehåller min manual.

Här är hur de 3 mest redigerade filerna ser ut:

Copyright:

```
 1 Format: https://www.debian.org/doc/packaging-manuals/copyright-format/1.0/
 2 Upstream-Name: electrotest-standalone
 3 Upstream-Contact: Adam El Soudi <adamsirrety@gmail.com>
 4 Source: https://www.umu.se
 5
 6 Files: *
 7 Copyright: 2024, Adam El Soudi
 8 License: GPL-3.0-or-later
 9
10 License: GPL-3.0-or-later
11  Here is a license so I dont get more warnings.
```

Control:

```
 1 Source: electrotest-standalone
 2 Section: misc
 3 Priority: optional
 4 Maintainer: Adam <adamsirrety@gmail.com>
 5 Build-Depends: debhelper-compat (= 12)
 6 Standards-Version: 4.5.0
 7 Homepage: https://www.google.com
 8
 9 Package: electrotest-standalone
10 Architecture: any
11 Multi-Arch: foreign
12 Depends: ${misc:Depends}, ${shlibs:Depends}
13 Description: auto-generated package by debmake
14  This Debian binary package was auto-generated by the
15  debmake(1) command provided by the debmake package.
```

Changelog:

```
1 electrotest-standalone (1.0-1) UNRELEASED; urgency=low
2
3   * Initial release
4   * Fake bug closure (Closes: #123456)
5
6  -- Adam <adamsirrety@gmail.com>  Sun, 26 May 2024 14:44:42 +0000
```

När jag löst alla errors och varningar byggde jag om och körde sen "lintian" kommandot igen för att dubbelkolla att inga fler varningar fanns kvar.