[Install dependencies from setup.py](https://stackoverflow.com/questions/26900328/install-dependencies-from-setup-py)

Q:

I wonder if as well as .deb packages for example, it is possible in my setup.py I configure the dependencies for my package, and run:

$ sudo python setup.py install

They are installed automatically. Already researched the internet but all I found out just leaving me confused, things like "requires", "install\_requires" and "requirements.txt"

A1:

Just create requirements.txt in your lib folder and write all dependencies like this:

gunicorn

docutils>=0.3

lxml==0.5a7

Then create a setup.py script and read the requirements.txt in:

import os

thelibFolder = os.path.dirname(os.path.realpath(\_\_file\_\_))

requirementPath = thelibFolder + '/requirements.txt'

install\_requires = [] # Examples: ["gunicorn", "docutils>=0.3", "lxml==0.5a7"]

if os.path.isfile(requirementPath):

with open(requirementPath) as f:

install\_requires = f.read().splitlines()

setup(name="yourpackage", install\_requires=install\_requires, [...])

The execution of python setup.py install will install your package and all dependencies. Like @jwodder said it is not mandatory to create a requirements.txt file, you can just set install\_requires directly in the setup.py script. But writing a requirements.txt file is a good practice.

In the setup function you also have to set version, packages, author, etc, read the doc for a complete example: <https://docs.python.org/3/distutils/setupscript.html>

You package dir will look like this:

├── yourpackage

│   ├── yourpackage

│   │   ├── \_\_init\_\_.py

│   │   └── yourmodule.py

│   ├── requirements.txt

│   └── setup.py

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install\_requires = list(f.read().splitlines()) is much more straightforward than appending one line at a time in a loop. (The list call may or may not be necessary; test and see.) – [jpmc26](https://stackoverflow.com/users/1394393/jpmc26) [Oct 30 '18 at 17:32](https://stackoverflow.com/questions/26900328/install-dependencies-from-setup-py#comment93038109_53069528)

* Or maybe something like [line for line in f.read().splitlines() if len(line) > 0] to prevent blank lines – [hayj](https://stackoverflow.com/users/3406616/hayj" \o "712 reputation) [Oct 30 '18 at 17:35](https://stackoverflow.com/questions/26900328/install-dependencies-from-setup-py#comment93038205_53069528)
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Or you could just forego the requirements.txt file entirely and write setup(install\_requires=['gunicorn', 'docutils>=0.3', 'lxml==0.5a7'], ...) directly in your setup.py. – [jwodder](https://stackoverflow.com/users/744178/jwodder" \o "46,041 reputation) [Oct 30 '18 at 17:42](https://stackoverflow.com/questions/26900328/install-dependencies-from-setup-py#comment93038419_53069528)

* I'd add, one should ignore comments and whitespaces prefix install\_requires = [line for line in map(str.lstrip, f.read().splitlines()) if len(line) > 0 and not line.startswith('#')] – [Shay Ben-Sasson](https://stackoverflow.com/users/1640414/shay-ben-sasson) [May 24 '20 at 5:50](https://stackoverflow.com/questions/26900328/install-dependencies-from-setup-py#comment109625182_53069528)
* This will connect to the internet and install all the dependencies right? how can I instruct it to install from a local repo? will simply doing pip install mypacke.whl --no-index --find-links deps\_folder do the trick? – [Rika](https://stackoverflow.com/users/2736559/rika) [Jul 8 '20 at 3:23](https://stackoverflow.com/questions/26900328/install-dependencies-from-setup-py#comment111032318_53069528)

A2:

Another possible solution

try:

# for pip >= 10

from pip.\_internal.req import parse\_requirements

except ImportError:

# for pip <= 9.0.3

from pip.req import parse\_requirements

def load\_requirements(fname):

reqs = parse\_requirements(fname, session="test")

return [str(ir.req) for ir in reqs]

setup(name="yourpackage", install\_requires=load\_requirements("requirements.txt"))

@muammar it could fail because pip is explicitly not supposed to be used programmatically. See that \_ in pip.\_internal.req? That means it's part of a package's internals, which shouldn't be used externally and may change without warning. There is absolutely no guarantee that it won't suddenly change, and in fact it has. – [MattDMo](https://stackoverflow.com/users/1426065/mattdmo" \o "89,832 reputation) [Nov 7 '20 at 0:14](https://stackoverflow.com/questions/26900328/install-dependencies-from-setup-py#comment114438666_55647193)