

Compiling a Python Program

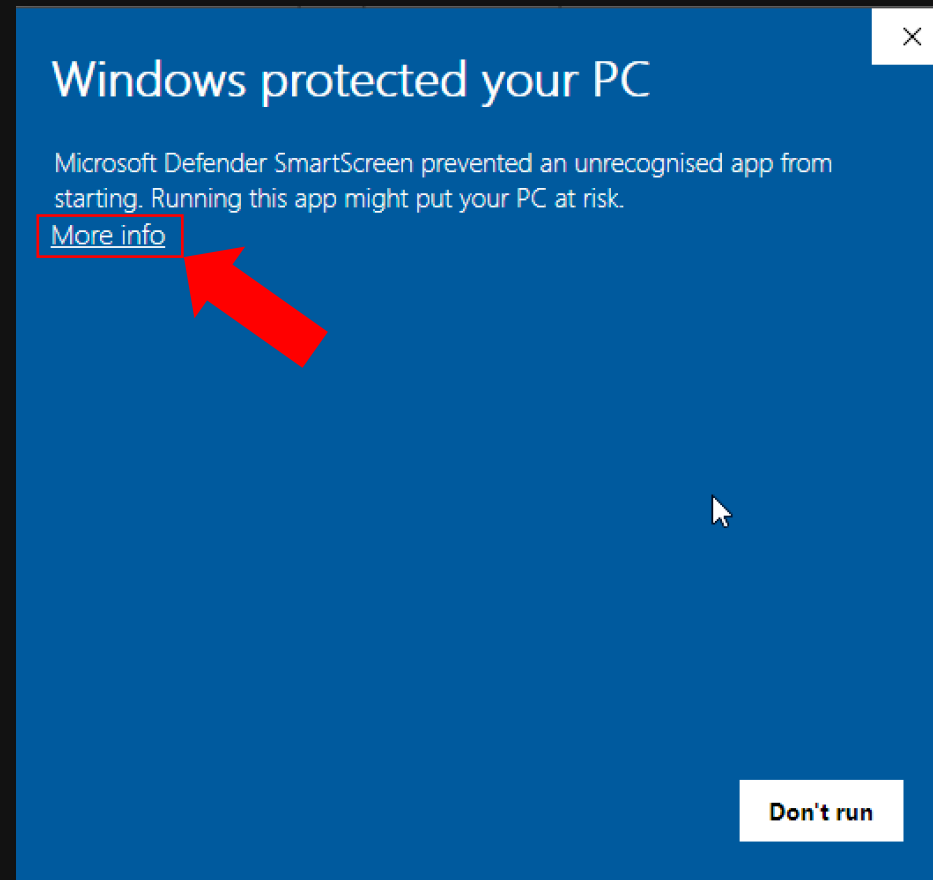
Installing Nuitka on Windows 10 & 11

1. Go to <https://nuitka.net/>
2. Go to the Download tab on the navigation
<https://nuitka.net/pages/download.html>
3. Go down to Packages > Windows and select the compiler version for the version of Python you're using. We want to compile Python 3.9 code. So we're downloading the 64-bit version -
<https://nuitka.net/releases/Nuitka-6.1.177.win-amd64.py39.msi>
4. Run the downloaded Windows Installer.
5. Click on [More info](#)



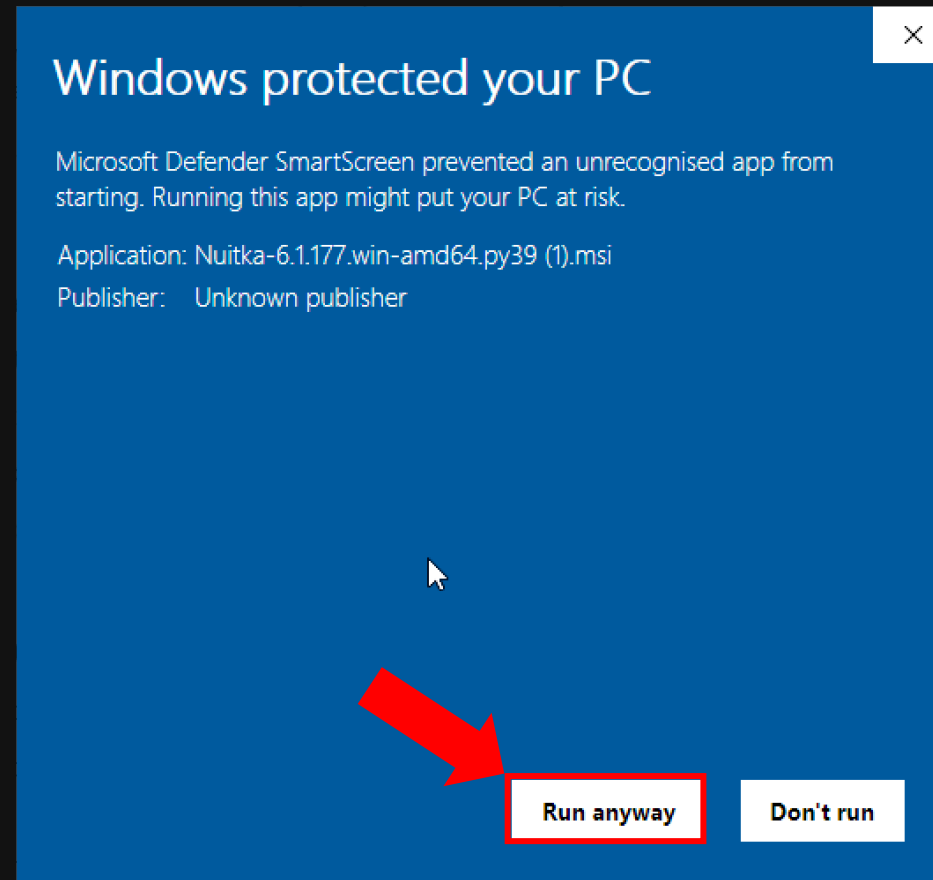
Installing Nuitka on Windows 10 & 11

5. Click on More info



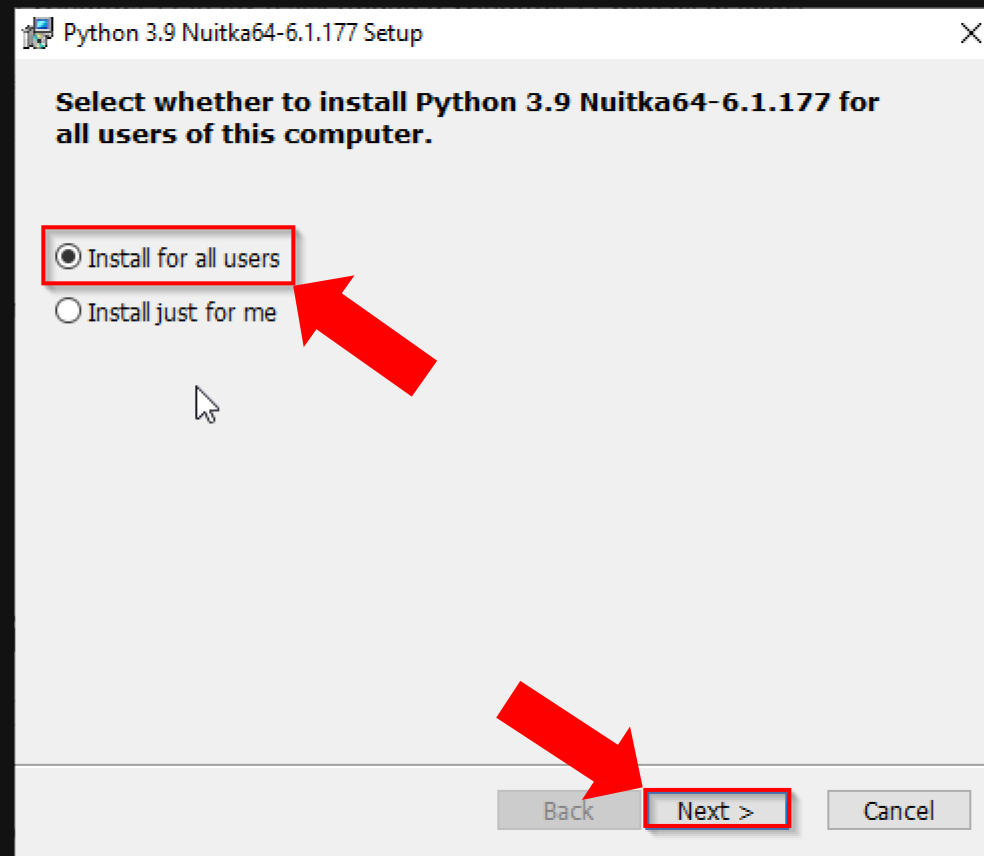
Installing Nuitka on Windows 10 & 11

6. Click on **Run anyway** button.



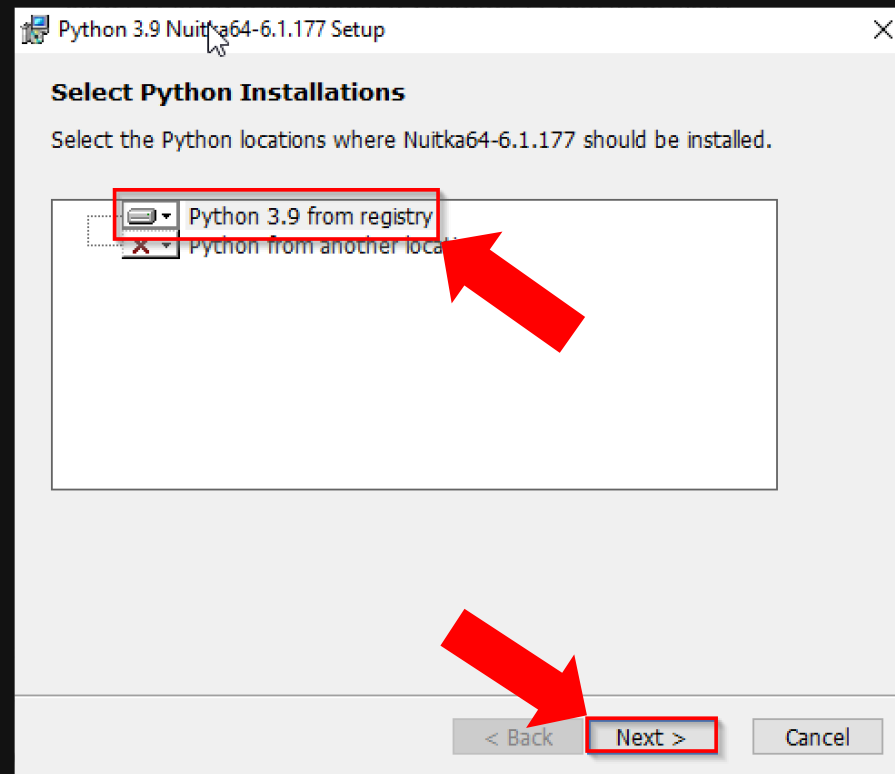
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7. Click on **Install for all users**. Then click **Next >**



Installing Nuitka on Windows 10 & 11

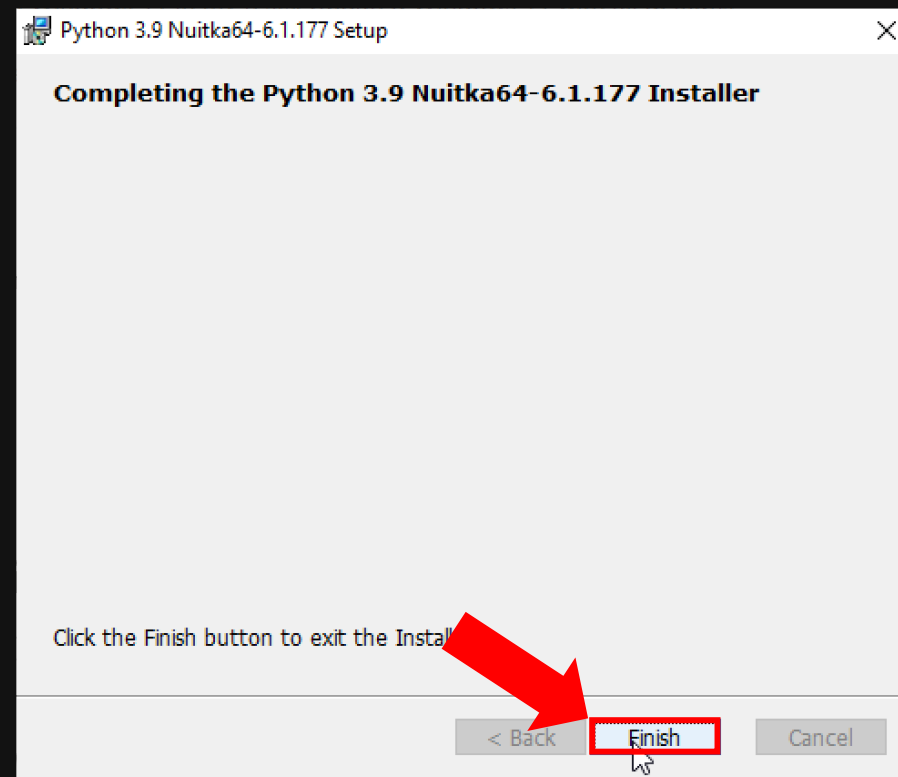
8. Specify the Python 3.9 compiler you want to use. Might be easiest to just use the **Python 3.9 from registry**.



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9. Do you want to allow app to make changes (Select Yes)

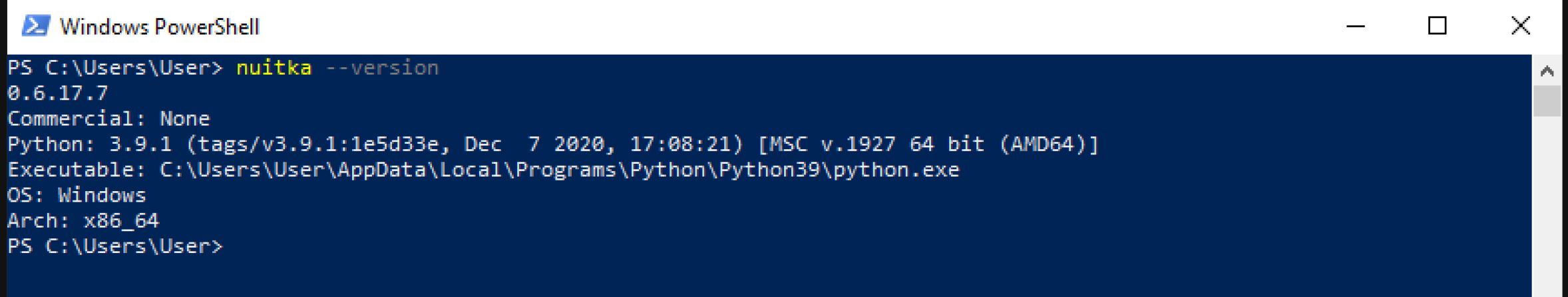
10. Click on **Finish** to complete installation



Installing Nuitka on Windows 10 & 11

11. Verify your Nuitka installation was successful open Powershell and run the following command.

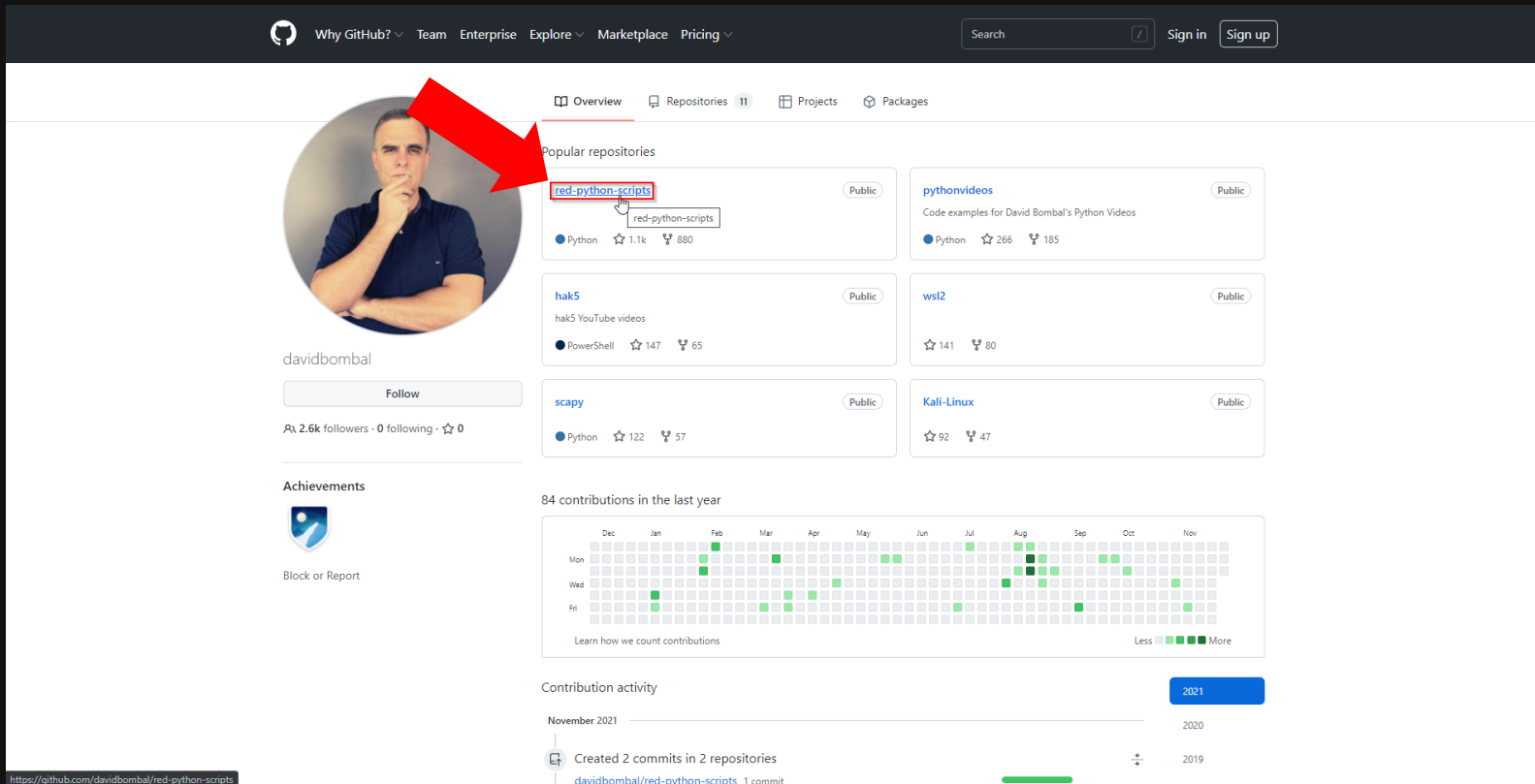
```
nuitka --version
```



```
Windows PowerShell
PS C:\Users\User> nuitka --version
0.6.17.7
Commercial: None
Python: 3.9.1 (tags/v3.9.1:1e5d33e, Dec 7 2020, 17:08:21) [MSC v.1927 64 bit (AMD64)]
Executable: C:\Users\User\AppData\Local\Programs\Python\Python39\python.exe
OS: Windows
Arch: x86_64
PS C:\Users\User>
```


Get the file you want to compile from GitHub

1. Go to <https://github.com/davidbombal>
2. Click on **python-red-scripts**

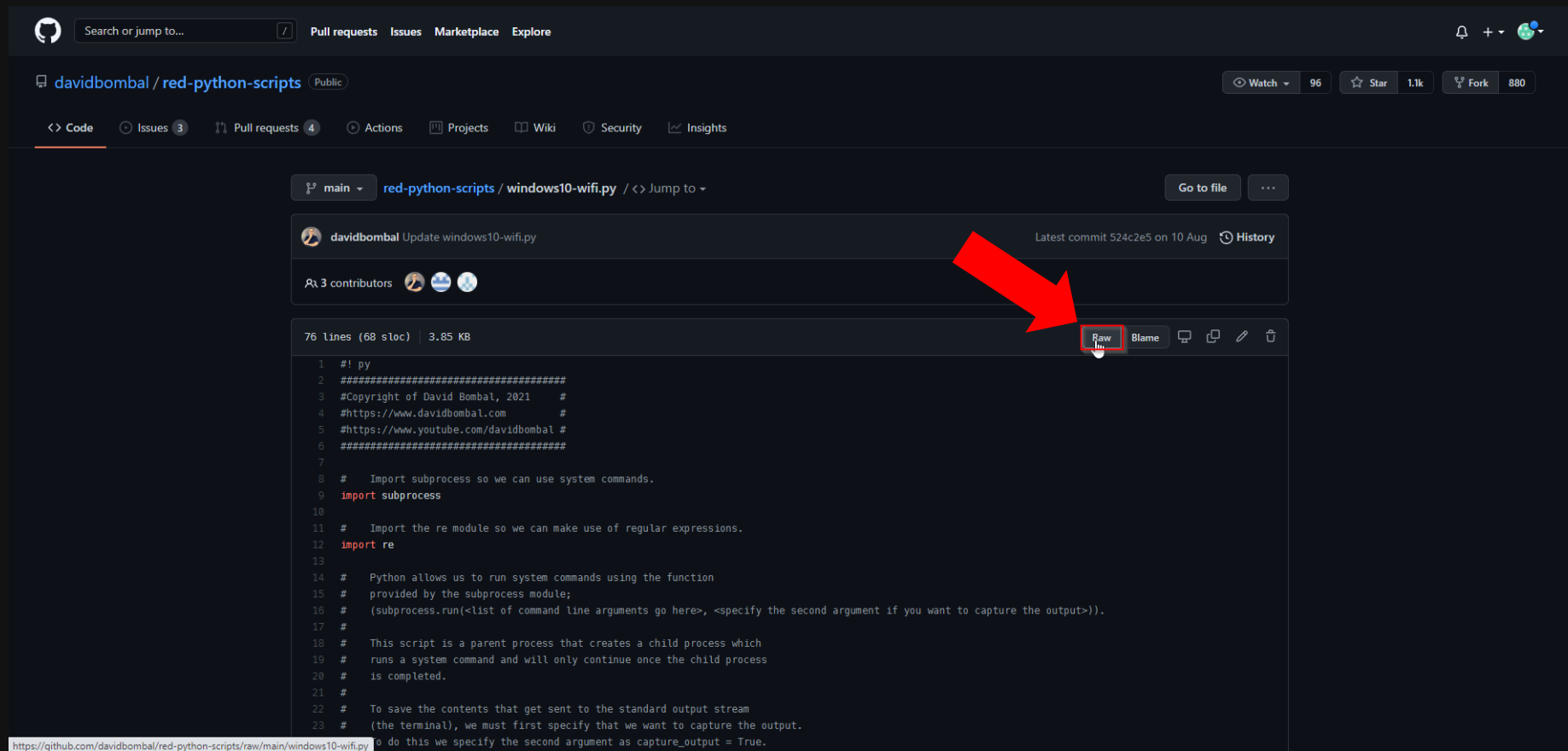


The screenshot shows the GitHub profile of David Bombal. The profile includes a profile picture, the username 'davidbombal', a 'Follow' button, and statistics: 2.6k followers, 0 following, and 0 stars. Below the profile information are 'Achievements' and a 'Block or Report' button. The 'Popular repositories' section lists several repositories, with 'red-python-scripts' highlighted by a red arrow. The repository 'red-python-scripts' is a Python repository with 1.1k stars and 880 forks. Other repositories listed include 'pythonvideos', 'hak5', 'wsl2', 'scapy', and 'Kali-Linux'. Below the repositories is a 'Contribution activity' section showing a calendar grid for the last year with 84 contributions. The bottom of the page shows a 'Contribution activity' bar for November 2021, indicating 2 commits in 2 repositories.



Get the file you want to compile from GitHub

3. Click on the file "**windows10-wifi.py**". Then click on Raw when it loaded.



Get the file you want to compile from GitHub

4. Right click and use **Save as** to download the code (Can also use **Ctrl + S**).

```
#!/ py
#####
#Copyright of David Bombal, 2021 #
#https://www.davidbombal.com #
#https://www.youtube.com/davidbombal #
#####

# Import subprocess so we can use system commands.
import subprocess

# Import the re module so we can make use of regular expressions.
import re

# Python allows us to run system commands
# provided by the subprocess module;
# (subprocess.run(<list of command line a
#
# This script is a parent process that cr
# runs a system command and will only con
# is completed.
#
# To save the contents that get sent to t
# (the terminal), we must first specify t
# To do this we specify the second argume
# This information gets stored in the std
# needs to be decoded before being used a
command_output = subprocess.run(["netsh", "w

# We imported the re module to make use o
# We want to find all the wifi names whic
# "ALL User Profile :". Using regular
# a group of all characters until the ret
profile_names = (re.findall("All User Profile : (.*)\r", command_output))

# We create an empty list outside of the loop where dictionaries
# containing all the wifi usernames and passwords will be saved.
wifi_list = []

# If any profile names are not found this means that wifi connections
# have also not been found. So we run this part to check the
# details of the wifi and see whether we can get their passwords.
if len(profile_names) != 0:
    for name in profile_names:
        # Every wifi connection will need its own dictionary which
        # will be appended to the variable wifi_list.
        wifi_profile = {}
        # We can now run a more specific command to see the information
        # about the wifi connection and if the Security key
        # is not absent it may be possible to get the password.
        profile_info = subprocess.run(["netsh", "wlan", "show", "profile", name], capture_output = True).stdout.decode()
        # We use the regular expression to only look for the absent cases so we can ignore them.
        if re.search("Security key : Absent", profile_info):
            continue
        else:
            # Assign the ssid of the wifi profile to the dictionary.
            wifi_profile["ssid"] = name
            # These cases aren't absent and we should run the
            # "key=clear" command part to get the password.
            profile_info_pass = subprocess.run(["netsh", "wlan", "show", "profile", name, "key=clear"], capture_output = True).stdout.decode()
            # Again run the regular expression to capture the
```

Compiling Python code using Nuitka

1. Open Powershell. Change directory into the correct directory where you want to be. Say I want to go to compile directory in Documents. I can just enter:

```
cd C:\Users\User\Documents\compile
```

2. Compile a file using the following command:

```
py -m nuitka --mingw64 windows10-wifi.py --standalone --onefile
```

```
py -<python-version> -m nuitka --mingw64 <filename>.py --standalone --onefile
```

Compiling Python code using Nuitka

- The flags `—standalone` and `—onefile` makes the executable independent of the Python installation.
- `—mingw64` will download a MinGW64 C Compiler and also ask to download a C caching tool. You should say yes to both.
- The exe file generated will be named `<filename>.exe` from `<filename>.py`