

How to use ChatGPT from Ubuntu Terminal using ShellGPT

Artificial intelligence has emerged as a phenomenon in the new age. With new features added daily, there's a lot to look forward to.

People use this universal, versatile tool to tell jokes, write code, and even answer the most random questions. It's easy to use ChatGPT on other operating systems, so as a Linux user, are you willing to be left behind?

You can also enjoy a version of ChatGPT for Linux, ShellGPT. Here's how to install and use this AI tool from Ubuntu Terminal with a few simple steps.

Step 1: Install Python and PIP on the machine

Like most AI-powered tools, even ShellGPT runs on Python. Although Python is usually installed by default on most Linux distributions, you can check its installation through the version information. If Python is not available on your machine, you must install it before moving on to the next steps.

Open a Terminal and enter the following commands to check the version of Python:

```
python3 --version
```

If the command returns the version number output, you can rest assured that everything will be ready to go. However, if you encounter any errors, you should install Python on Ubuntu, before installing PIP.

Now that you have Python installed on your machine, it's time to install PIP, Python's native package manager.

Although PIP is usually pre-installed with the Python package, it is best to check the version first for its installation status. Run the following command to check if it is installed on your machine:

```
pip --version
```

If you get an error after executing, you need to install the package manager:

Command 'pip' not found, but can be installed with:

You can use the following command to install it:

```
sudo apt install python3-pip
```

```
Activites terminal Mar 23 23:39
sahil@vm: ~/Desktop
sahil@vm:~/Desktop$ pip --version
Command 'pip' not found, but can be installed with:
sudo apt install python3-pip
sahil@vm:~/Desktop$ sudo apt-get install python3-pip -y
[sudo] password for sahil:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
libflashrom1 libftdi1-2 libllvm13
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
binutils binutils-common binutils-x86-64-linux-gnu build-essential dpkg-dev fakeroot g++ g++-11
gcc gcc-11 javascript-common libalgorithm-diff-perl libalgorithm-diff-xs-perl
libalgorithm-merge-perl libasan6 libbinutils libc-dev-bin libc-devtools libc6-dev libcc1-0
libcrypt-dev libctf-nobfd0 libctf0 libdpkg-perl libexpat1-dev libfakeroot libfile-fcntllock-perl
libgcc-11-dev libitm1 libjs-jquery libjs-sphinxdoc libjs-underscore liblsan0 libnsl-dev
libpython3-dev libpython3.10-dev libquadmath0 libstdc++-11-dev libtirpc-dev libtsan0 libubsan1
linux-libc-dev lto-disabled-list make manpages-dev python3-dev python3-distutils
python3-setuptools python3-wheel python3.10-dev rpcsvc-proto zlib1g-dev
Suggested packages:
binutils-doc debian-keyring g++-multilib g++-11-multilib gcc-11-doc gcc-multilib autoconf
```

After installation, you can use the **--version** command again to check if the installation was successful.

Step 2: Install and set up a virtual environment using Python

Now that Python and PIP are ready, you can set up Python's virtual environment to make it convenient to install and run ShellGPT. Virtual environments are ideal for running isolated programs as they can avoid library conflicts.

With the included virtual environment, you can limit the interaction between the system's programs and the virtual environment while performing various executables in the silo.

Note : Using virtual environment is an optional step, to avoid any unforeseen risks while installing and using Python libraries.

To create a virtual environment using Python, you need to install the venv module:

```
sudo apt install python3-venv -y
```

```
Activites terminal Mar 23 23:31
sahil@vm: ~/Desktop
sahil@vm:~/Desktop$ sudo apt install python3-venv -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
libflashrom1 libftdi1-2 libllvm13
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
python3-pip-whl python3-setuptools-whl python3.10-venv
The following NEW packages will be installed:
python3-pip-whl python3-setuptools-whl python3-venv python3.10-venv
0 upgraded, 4 newly installed, 0 to remove and 2 not upgraded.
Need to get 2,474 kB of archives.
After this operation, 2,888 kB of additional disk space will be used.
Get:1 http://in.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 python3-pip-whl all 22.0.2+dfs
g-1ubuntu0.2 [1,679 kB]
Get:2 http://in.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 python3-setuptools-whl all 59.
6.0-1.2ubuntu0.22.04.1 [788 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 python3.10-venv amd64 3.10.6-1
~22.04.2ubuntu1 [5,718 B]
Get:4 http://in.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 python3-venv amd64 3.10.6-1~22
... 04 [1,038 B]
```

Set up virtual environment

After installing the virtual environment, you can set up the virtual environment so that it can seamlessly support ShellGPT commands.

First, create a new folder to organize and store files. You can use the `mkdir` command, followed by the directory name, like this:

```
mkdir cli-shellgpt
```

Navigate to this newly created directory with the `cd` command:

```
cd cli-shellgpt
```

Then, create a new virtual environment with the `venv` command, followed by the environment name:

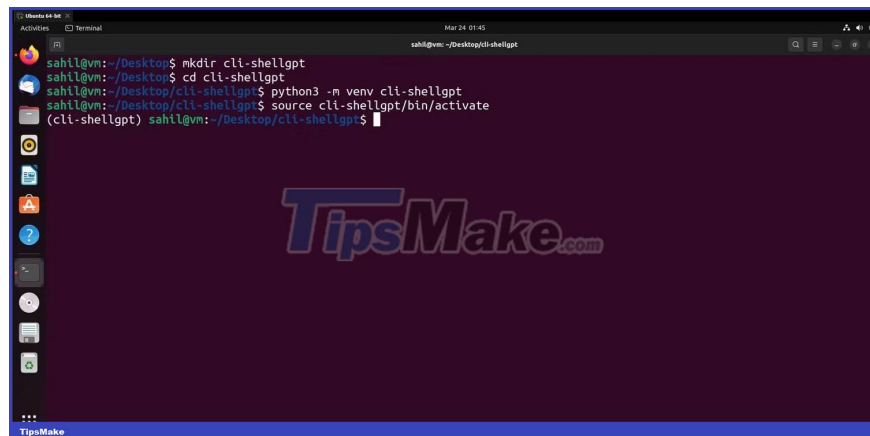
```
python3 -m venv cli-shellgpt
```

Since the virtual environment is not enabled by default, you must enable it manually with the **activate** script :

```
source cli-shellgpt/bin/activate
```

As soon as you execute the above command, you will notice the default Linux shell prompt of Linux changes, as shown below:

```
(cli-shellgpt) sahil@vm:
```



The screenshot shows a terminal window with the following commands and output:

```
sahil@vm:~/Desktop$ mkdir cli-shellgpt
sahil@vm:~/Desktop$ cd cli-shellgpt
sahil@vm:~/Desktop/cli-shellgpt$ python3 -m venv cli-shellgpt
sahil@vm:~/Desktop/cli-shellgpt$ source cli-shellgpt/bin/activate
(cli-shellgpt) sahil@vm: ~/Desktop/cli-shellgpt$
```

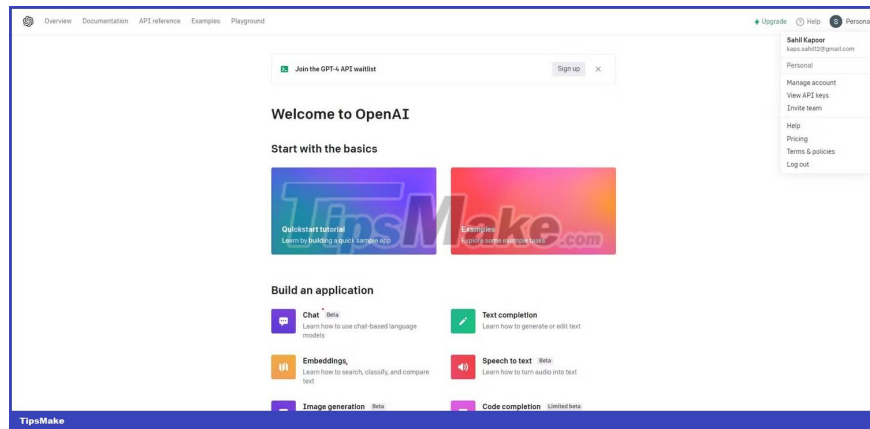
The terminal window also displays a large watermark for 'TipsMake.com' in the background.

Step 3: Generate OpenAPI key

Since the virtual environment is ready, you must connect your OpenAI services and Ubuntu machine to run ShellGPT. For this to work, you must navigate to the OpenAI website and create an account there.

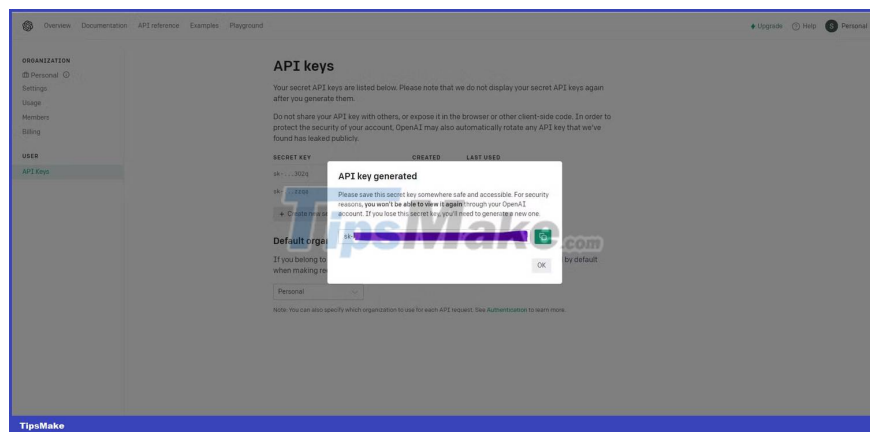
If you already have an account, you can log in with your credentials and navigate to your profile picture, located at the top right of the website.

Click **View API Keys** , then click **Create new secret key** .



Do not share this key with anyone because the connection is private and only used on your machine.

Copy the API key from the dialog and save it somewhere because you won't be able to see the same key again.



To establish a connection on your Ubuntu machine, create an environment variable with the **export** command :

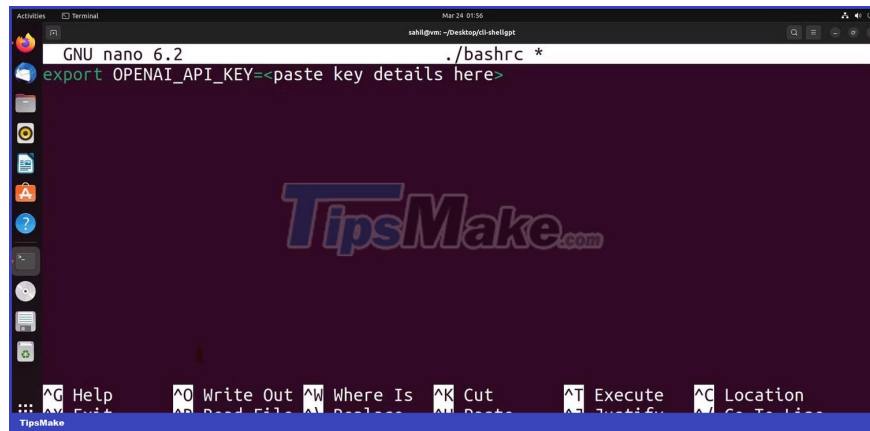
```
export OPENAI_API_KEY=
```

Add and verify the API key to the virtual environment variable

When you execute the API key this way, Linux will only use it for a single instance. However, if you want the executable to be permanent, save it to the `.bashrc` file.

All you have to do is enter the first command and enter the next in a text editor:

```
nano ./bashrc export OPENAI_API_KEY=
```

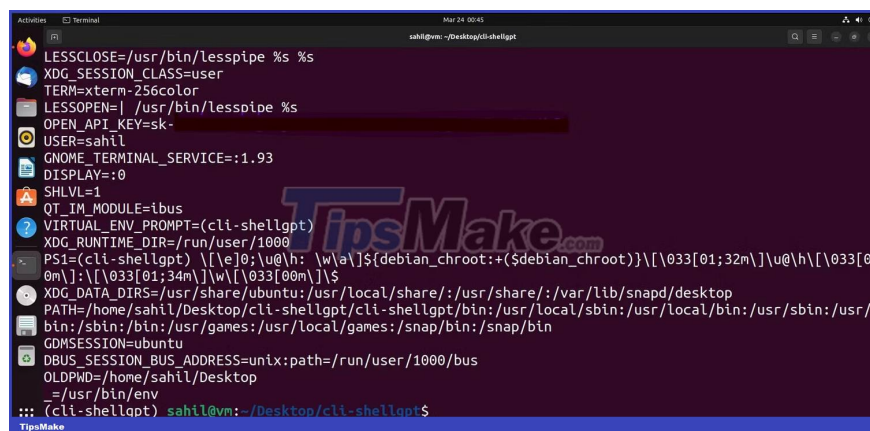


Save and exit the editor. Then use the **source** command to trigger the changes.

```
source ./bashrc
```

Finally, verify the API key with the env command.

```
env
```

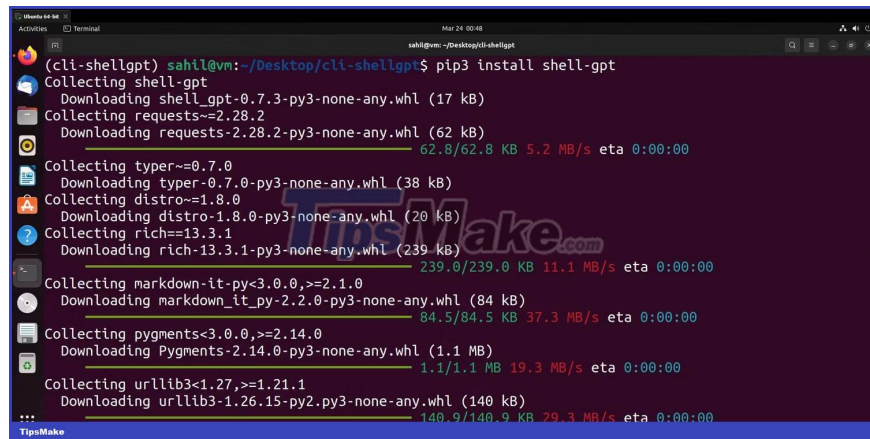


Your OPENAI_API_KEY environment variable should be listed in the output.

Step 5: Install ShellGPT on Ubuntu

Once all the installation procedures are complete, you can simply move on to the best part, installing ShellGPT. The installation steps are quite simple and you can install the tool with the following command:

```
pip3 install shell-gpt
```

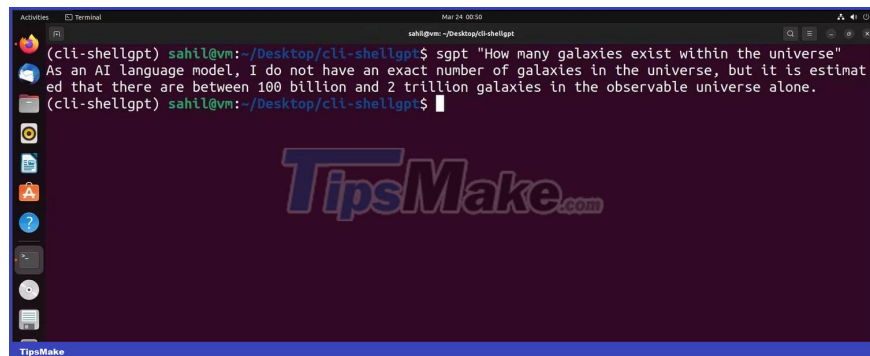


Let the installation finish; meanwhile, you can see some cool ways to use AI tools through your Terminal window.

Use ShellGPT to run queries via Terminal

The whole purpose of installing ShellGPT is to make your life easier. To use Terminal as a search engine and run some queries, you can use the `sgpt` command, followed by your query in quotes:

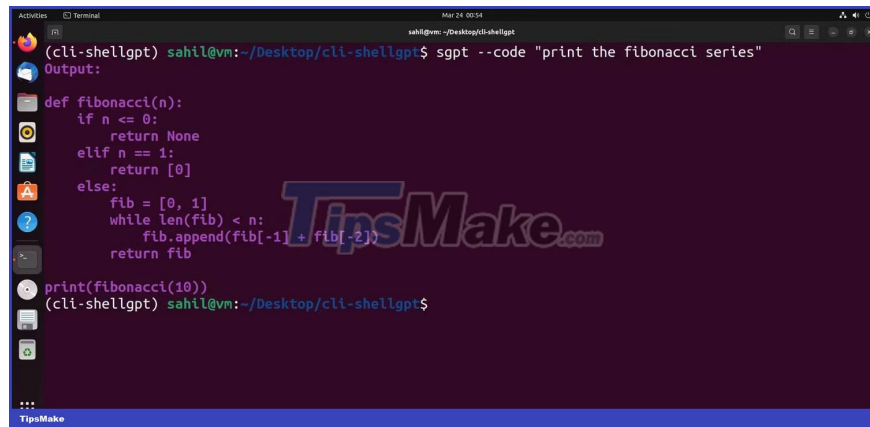
```
sgpt "How many galaxies exist within the universe"
```



Use ShellGPT to generate code

You can also use ShellGPT to generate code. You can do that by passing the correct command with the `sgpt` command :

```
sgpt --code "print the Fibonacci series"
```

A terminal window titled "Terminal" with the date "Mar 24 00:54" and the path "sahil@vm: ~/Desktop/cli-shellgpt". The prompt is "(cli-shellgpt) sahil@vm:~/Desktop/cli-shellgpt\$". The command "sgpt --code 'print the fibonacci series'" has been executed. The output is "Output:" followed by a Python code block. The code defines a function "fibonacci(n)" that returns the Fibonacci sequence up to the nth number. It includes a "while" loop to generate the sequence and a "print" statement to output the result for "n=10". The prompt returns to "(cli-shellgpt) sahil@vm:~/Desktop/cli-shellgpt\$". A "TipsMake.com" watermark is visible in the background of the terminal.

```
(cli-shellgpt) sahil@vm:~/Desktop/cli-shellgpt$ sgpt --code "print the fibonacci series"
Output:
def fibonacci(n):
    if n <= 0:
        return None
    elif n == 1:
        return [0]
    else:
        fib = [0, 1]
        while len(fib) < n:
            fib.append(fib[-1] + fib[-2])
        return fib
print(fibonacci(10))
(cli-shellgpt) sahil@vm:~/Desktop/cli-shellgpt$
```

The output includes code that you can execute in Python to generate the Fibonacci sequence.

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