

```
# Import required Python package
!pip install pandas

# Install Node.js (because tweet-harvest built using Node.js)
!sudo apt-get update
!sudo apt-get install -y ca-certificates curl gnupg
!sudo mkdir -p /etc/apt/keyrings
!curl -fsSL https://deb.nodesource.com/gpgkey/nodesource-repo.gpg.key | sudo gpg --dearmor -o /etc/apt/keyrings/nodesource.gpg

!NODE_MAJOR=20 && echo "deb [signed-by=/etc/apt/keyrings/nodesource.gpg] https://deb.nodesource.com/node_${NODE_MAJOR}.x nodistro main" | sudo tee /etc/apt/sources.list.d/nodesource.list

!sudo apt-get update
!sudo apt-get install nodejs -y

!node -v

Get:4 http://archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:5 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:6 http://archive.ubuntu.com/ubuntu jammy-backports InRelease [109 kB]
Hit:7 https://ppa.launchpadcontent.net/c2d4u.team/c2d4u4.0+/ubuntu jammy InRelease
Get:8 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [1,342 kB]
Get:9 http://archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [1,266 kB]
Hit:10 https://ppa.launchpadcontent.net/deadsnakes/ppa/ubuntu jammy InRelease
Hit:11 https://ppa.launchpadcontent.net/graphics-drivers/ppa/ubuntu jammy InRelease
Hit:12 https://ppa.launchpadcontent.net/ubuntugis/ppa/ubuntu jammy InRelease
Fetched 2,950 kB in 2s (1,221 kB/s)
Reading package lists... Done
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
ca-certificates is already the newest version (20230311ubuntu0.22.04.1).
curl is already the newest version (7.81.0-1ubuntu1.13).
gnupg is already the newest version (2.2.27-3ubuntu2.1).
gnupg set to manually installed.
0 upgraded, 0 newly installed, 0 to remove and 18 not upgraded.
deb [signed-by=/etc/apt/keyrings/nodesource.gpg] https://deb.nodesource.com/node\_20.x nodistro main
Hit:1 https://cloud.r-project.org/bin/linux/ubuntu jammy-cran40/ InRelease
Hit:2 https://developer.download.nvidia.com/compute/cuda/repos/ubuntu2204/x86\_64 InRelease
Get:3 https://deb.nodesource.com/node\_20.x nodistro InRelease [12.1 kB]
Get:4 https://deb.nodesource.com/node\_20.x nodistro/main amd64 Packages [2,902 B]
Hit:5 http://security.ubuntu.com/ubuntu jammy-security InRelease
Hit:6 http://archive.ubuntu.com/ubuntu jammy InRelease
Get:7 http://archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Hit:8 https://ppa.launchpadcontent.net/c2d4u.team/c2d4u4.0+/ubuntu jammy InRelease
Hit:9 http://archive.ubuntu.com/ubuntu jammy-backports InRelease
Hit:10 https://ppa.launchpadcontent.net/deadsnakes/ppa/ubuntu jammy InRelease
Hit:11 https://ppa.launchpadcontent.net/graphics-drivers/ppa/ubuntu jammy InRelease
Hit:12 https://ppa.launchpadcontent.net/ubuntugis/ppa/ubuntu jammy InRelease
Fetched 134 kB in 2s (55.8 kB/s)
Reading package lists... Done
Reading package lists... Done
```

```
received 51.1 MB in 15 (>7.4 MB/s)
debconf: unable to initialize frontend: Dialog
debconf: (No usable dialog-like program is installed, so the dialog based frontend cannot be used. at /usr/share/perl5/Debconf/FrontEnd/Dialog.pm line 78, <> line 1.)
debconf: falling back to frontend: Readline
debconf: unable to initialize frontend: Readline
debconf: (This frontend requires a controlling tty.)
debconf: falling back to frontend: Teletype
dpkg-preconfigure: unable to re-open stdin:
Selecting previously unselected package nodejs.
(Reading database ... 120875 files and directories currently installed.)
Preparing to unpack .../nodejs_20.8.0-1nodesource1_amd64.deb ...
Unpacking nodejs (20.8.0-1nodesource1) ...
Setting up nodejs (20.8.0-1nodesource1) ...
Processing triggers for man-db (2.10.2-1) ...
v20.8.0
```

Crawl Data

```
filename = 'result.csv'
search_keyword = 'jessicawongso'
limit = 20
```

```
!npx --yes tweet-harvest@latest -o "{filename}" -s "{search_keyword}" -l {limit}
```

```
Reading package lists... Done
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
fonts-freefont-ttf is already the newest version (20120503-10build1).
fonts-liberation is already the newest version (1:1.07.4-11).
libasound2 is already the newest version (1.2.6.1-1ubuntu1).
libatk-bridge2.0-0 is already the newest version (2.38.0-3).
libatk1.0-0 is already the newest version (2.36.0-3build1).
libatspi2.0-0 is already the newest version (2.44.0-3).
```

xvfb is already the newest version (2:21.1.4-2ubuntu1.7~22.04.1).
0 upgraded, 0 newly installed, 0 to remove and 18 not upgraded.

Opening twitter search page...

Found existing file ./tweets-data/result.csv, renaming to ./tweets-data/result.old.csv

Filling in keywords: jessicawongso

Got some tweets, saving to file...

Your tweets saved to: /content/tweets-data/result.csv

Total tweets saved: 17

Scrolling more...

Got some tweets, saving to file...

Your tweets saved to: /content/tweets-data/result.csv

Total tweets saved: 32

Already got 32 tweets. done scrolling...

```
import pandas as pd

# Specify the path to your CSV file
file_path = f"tweets-data/{filename}"

# Read the CSV file into a pandas DataFrame
df = pd.read_csv(file_path, delimiter=";")

# Display the DataFrame
display(df)
```



	created_at	id_str	full_text	quote_count	reply_count	retweet_count	favorite_count	lang		user_id_str	conversation_id_str	username	
0	Sat Oct 07 15:30:52 +0000 2023	1710679089961693219	Eksklusif! Saksikan Interview "Kesaksian Jes...	0	0	0	0	in		61377303	1710679089961693219	Lintas_MNCTV	https://twitter.com/Lint
1	Sat Oct 07 15:30:39 +0000 2023	1710679034865271289	Eksklusif! Saksikan Interview "Kesaksian Jes...	0	0	0	2	in		375995332	1710679034865271289	SeputariNews	https://twitter.com/Se
2	Sat Oct 07 15:30:24 +0000 2023	1710678973683020078	Eksklusif! Saksikan Interview "Kesaksian Jes...	0	0	0	0	in		543264218	1710678973683020078	GTVID_News	https://twitter.com/GTV
3	Sat Oct 07 15:30:16 +0000 2023	1710678936752181300	Eksklusif! Saksikan Interview "Kesaksian Jes...	0	0	0	0	in		132078023	1710678936752181300	officialnews_	https://twitter.com
4	Sat Oct 07 14:20:48 +0000 2023	1710661457254498427	temen2 dokter smuanya yg masih otw jd dokter o...	0	0	0	1	in		37406437	1710661457254498427	deviwulandari	https://twitter.com/d
5	Sat Oct 07 14:17:25 +0000 2023	1710660603386221016	@JessicaWongso_ Jessica adalah korban 🥲🥲🥲 🥲	0	0	0	0	in		2982200345	1709943801958248487	wen11368	https://twitter.com/wer
6	Sat Oct 07 13:43:12 +0000 2023	1710651993935712762	YUK DUKUNG JAGOAN MU & SEGERA MAINKAN DI M...	0	0	0	0	in	1459726310326951940	1710651993935712762	Merpatislot88	https://twitter.com/	
7	Sat Oct 07 13:24:12 +0000 2023	1710647214274695476	Ayah Mirna Akui Beri Uang Tutup Mulut ke Pakar...	0	0	0	0	in	1544145887290568705	1710647214274695476	WartaKota5	https://twitter.com/Wa	
8	Sat Oct 07 12:42:51 +0000 2023	1710636806260314219	Janggal!!! kasus kopi sianida #jessicaWongso r...	0	0	0	1	in	1204280047	1710636806260314219	RAYunikartika	https://twitter.com/F	
9	Sat Oct 07 12:17:42 +0000 2023	1710630476627742931	no otopsi no case, itu hukum international dan...	0	0	0	0	in	110416756	1710630476627742931	TTheodore	https://twitter.com/TTi	
10	Sat Oct 07 11:07:04 +0000 2023	1710612701767168240	YUK DUKUNG JAGOAN MU & SEGERA MAINKAN DI M...	0	0	0	0	in	1459726310326951940	1710612701767168240	Merpatislot88	https://twitter.com/	
11	Sat Oct 07 10:50:57 +0000 2023	1710608648320512457	jessica apakah korban??? #IceCold #jessica #mi...	0	0	0	0	in	1523593148160962560	1710608648320512457	prassyah	https://twitter.com/pr	
12	Sat Oct 07 10:38:25 +0000 2023	1710605491578233273	Ada yang sudah menonton? menurut kalian gimana...	0	0	0	0	in	1498468598876372994	1710605491578233273	TERBITharian	https://twitter.com/TE	
13	Sat Oct 07 09:57:03 +0000 2023	1710595082368541120	Omongan Edi Salihin Berbeda dengan dr Djadja s...	0	0	0	0	in	103551225	1710595082368541120	tribunkaltim	https://twitter.com/	

14	Sat Oct 07 09:34:49 +0000 2023	1710589486810431814	Bisakah bebas dari kasus sianida? #JessicaWon...	0	0	2	0	in	2340155395	1710589486810431814	suaradotcom	https://twitter.com/suaradotcom
15	Sat Oct 07 09:09:34 +0000 2023	1710583133060657240	Video gerakan tangan Jessica Wongso saat berad...	0	0	0	0	in	103551225	1710583133060657240	tribunkaltim	https://twitter.com/tribunkaltim
16	Sat Oct 07 09:00:19 +0000 2023	1710580804659695699	Ayah mendiang Wayan Mirna Salihin, Edi Darmawa...	0	0	0	1	in	41730943	1710580804659695699	VIVAcoid	https://twitter.com/VIVAcoid
17	Sat Oct 07 08:52:24 +0000 2023	1710578812063556018	dicoba gabung bersama bimasaktibet nikmati bon...	0	0	0	0	in	1644280359062994944	1710578812063556018	slotbima	https://twitter.com/slotbima
18	Sat Oct 07 08:41:42 +0000 2023	1710576120079540316	Slot Gacor Hari ini - SABTU, 07 OKTOBER 2023 ...	0	0	0	0	in	1459726310326951940	1710576120079540316	Merpatislot88	https://twitter.com/Merpatislot88
19	Sat Oct 07 07:37:20 +0000 2023	1710559922600223213	Dan 1 biji sawi pun perbuatan di langit dan di...	0	0	0	0	in	832911791625613312	1710559922600223213	Bodrot3	https://twitter.com/Bodrot3
20	Sat Oct 07 07:23:42 +0000 2023	1710556488480202899	@0Gagal Yg satu dizalimi....yg satu naik pangk...	0	0	0	0	in	832911791625613312	1709451042856030705	Bodrot3	https://twitter.com/Bodrot3
21	Sat Oct 07 06:24:55 +0000 2023	1710541698877862082	Pengakuan Mengejutkan Jessica Wongso di Dalam ...	0	0	0	0	in	115936810	1710541698877862082	tribunpontianak	https://twitter.com/tribunpontianak
22	Sat Oct 07 06:23:06 +0000 2023	1710541239198900688	KASUS KOPI SIANIDA JESSICA WONGSO BAKAL DI BUK...	0	0	0	0	in	1481235772972089346	1710541239198900688	Eliena01399980	https://twitter.com/Eliena01399980
23	Sat Oct 07 06:21:49 +0000 2023	1710540918376550756	#justiceforjessica #jessicawongso	0	0	0	0	qht	1241906350780592128	1710540918376550756	tsmviii	https://twitter.com/tsmviii
24	Sat Oct 07 05:30:27 +0000 2023	1710527988859834670	emang boleh se hah heh hoh ini, abis nonton ac...	0	1	0	0	in	1702166074488508416	1710527988859834670	claraaulia63094	https://twitter.com/claraaulia63094
25	Sat Oct 07 05:26:42 +0000 2023	1710527046831817166	harus di up lagi ga si kasusnya apalagi abis n...	1	0	0	4	in	1702176390970540032	1710527046831817166	tiarakemala_24	https://twitter.com/tiarakemala_24
	Sat Oct 07 05:26:42 +0000 2023		ditaya apa									

Cek jumlah data yang didapatkan

```
num_tweets = len(df)
print(f"Jumlah tweet dalam dataframe adalah {num_tweets}.")
```

Jumlah tweet dalam dataframe adalah 32.

semua...

```
df1 = pd.DataFrame(df[ 'full_text' ])
df1
```

index	full_text
0	Eksklusif! Saksikan Interview "Kesaksian Jessica Petaka Kopi Sianida" Hanya di Channel Youtube Official iNews https://t.co/rGu45po0zm #KopiSianida #IceCold #JessicaWongso https://t.co/QM8IXf7IYM
1	Eksklusif! Saksikan Interview "Kesaksian Jessica Petaka Kopi Sianida" Hanya di Channel Youtube Official iNews https://t.co/sfDgxxdssj #KopiSianida #IceCold #JessicaWongso https://t.co/ujbt8CRggb
2	Eksklusif! Saksikan Interview "Kesaksian Jessica Petaka Kopi Sianida" Hanya di Channel Youtube Official iNews https://t.co/wgyXNFklbO #KopiSianida #IceCold #JessicaWongso https://t.co/Q2yembAMfW
3	Eksklusif! Saksikan Interview "Kesaksian Jessica Petaka Kopi Sianida" Hanya di Channel Youtube Official iNews https://t.co/SqKMdb6K22 #KopiSianida #IceCold #JessicaWongso https://t.co/nxMTzhDsZJ
4	temen2 dokter smuanya yg masih otw jd dokter or mo ambil spesialis, sok pada jadi dokter forensik ya pls biar ada dr. Djaja, dr. Djaja yang lain 🙏 #IceCold #JessicaWongso
5	@JessicaWongso_ Jessica adalah korban 🥹🥹🥹🥹
6	YUK DUKUNG JAGOAN MU & SEGERA MAINKAN DI MERPATISLOT88 LINK LOGIN MERPATISLOT88: https://t.co/XQRqZpRJ71 #Indonesia #Merpatislot88 #IceColdNetflix #Gaza #Palestina #persija #bonek #rtp #Israel #PersebayaDay # #Komedi #Viral #mixparlay #Tren #Fyp https://t.co/7qetqXIHXt
7	Ayah Mirna Akui Beri Uang Tutup Mulut ke Pakar Psikologi Forensik, Sebut Bukan Suap Tapi Kasihan https://t.co/ZkeBYHSV9T lewat @tribunnews #edidarmawan #IceCold #JessicaWongso #kopisianida
8	Janggal!!! kasus kopi sianida #jessicawongso rame lagi gara gara dokumenter Netflix Ice Cold". Apa saja kenganggalannya ??? #Kopisianida #Mirna #kisahnya #sianida #icecold #netflix https://t.co/K9HSONKgBh"
9	no otopsi no case, itu hukum internasional dan dikuatkan oleh SOP Kapolri.....para penegak hukum sdh mati nalar #JessicaWongso.
10	YUK DUKUNG JAGOAN MU & SEGERA MAINKAN DI MERPATISLOT88🔴🔴🔴 LINK LOGIN MERPATISLOT88: https://t.co/XQRqZpRJ71 #Indonesia #Palestina #Alberto #Israel #PERSIBDAY #persijaday #thejak #bonek #liga1 #igainggris #Je #Komedi #Viral #Tren #Fyp https://t.co/mE2v6T0nId
11	jessica apakah korban??? #IceCold #jessica #mirna #jessicawongso #Netflix #netflixdocumentary https://t.co/zwpZOqGHDc
12	Ada yang sudah menonton? menurut kalian gimana? #icecoldmurdercoffeeandjessicawongso #jessicawongso #mirna #Sianida #dokumenter https://t.co/zfsKf8RGZ0
13	Omongan Edi Salihin Berbeda dengan dr Djadja soal Otopsi Jasad Mirna #TribunKaltim #EdiDarmawan #Mirna #JessicaWongso #KasusKopiSianida https://t.co/IdSq2iec9P lewat @tribunnews
14	Bisakah bebas dari kasus sianida? #JessicaWongso https://t.co/oOnKMayHN3
15	Video gerakan tangan Jessica Wongso saat berada di Cafe Olivier ditunjukkan Edi Darmawan, sudah dilihat Tito Karnavian dan Krishna Murti. #TribunKaltim #KasusKopiSianida #MirnaSalihin #JessicaWongso https://t.co/NFk7osigq3 lewat @tribun
16	Ayah mendiang Wayan Mirna Salihin, Edi Darmawan Salihin mengatakan jika dirinya punya bukti kuat Jessica Kumala Wongso atau Jessica Wongso menuang sianida ke dalam gelas anaknya. Selengkapnya: https://t.co/HGJ4G93Z4j ____ #Vivacoi https://t.co/kWSQcYzUmL
17	dicoba gabung bersama bimasaktibet nikmati bonus dan event yang sedang berjalan dengan cara klik link di bawah ini link : https://t.co/o0p0WQtTFE #bimasaktibet #bimasakti #paha #SelaluMenggoda #Mirna #emangboleh #Israel #guru #rehan # #rtpgacor https://t.co/7bjr9ITg8S
18	Slot Gacor Hari ini - SABTU, 07 OKTOBER 2023 ⇄ https://t.co/XQRqZpRJ71 #PERSIBDAY #Israel #Paha #Opung #JessicaWongso #Sunda #LIGA1 #PERSEBAYA #BONEK #persija #thejak #rtp #Maxwin #merpatislot88 #bonus #Memberbaru #s #Pulsa #Indonesia https://t.co/6e1SsJvTT8
19	Dan 1 biji sawi pun perbuatan di langit dan di bumi nantinya akan di hizab (hitung). Tetap tegar Jes..the innocent #jessicawongso. Struggle with in...#Mirna
20	@0Gagal Yg satu dizalimi....yg satu naik pangkat....tenang aj...hidup itu sebentar..dan 1 biji sawi pun akan di hizab (di hitung) nantinya...the innocent #jessicawongso
21	Pengakuan Mengejutkan Jessica Wongso di Dalam Buku Diary Pribadinya https://t.co/mFKS2zPTFu #jessicawongso #Mirna #kopisianida Mirna https://t.co/dSERI4TtpD
22	KASUS KOPI SIANIDA JESSICA WONGSO BAKAL DI BUKA KEMBALI...!! PENGACARA AKAN MENGAJUKAN PK KE PENGADILAN...!!! #TikTok #JESSICA #JESSICAWONGSO #KOPISIANIDA #SIANIDA #ICECOLD #Netflix #dedycorbuzer http:
23	#justiceforjessica #jessicawongso
24	emang boleh se hah heh hoh ini, abis nonton acara pak Karni Ilyas jadi makin makin sama bapaknya mirna #jessica #JessicaWongso #mirnasalihin #edisalihin #Karnillyas #viral #Trending https://t.co/CrTFJPUwhyY

Show 25 per page



Like what you see? Visit the [data table notebook](#) to learn more about interactive tables.
No charts were generated by quickchart

```
df.to_csv('pemilu2024.csv')
```

