

Run the code in the "TASK-5A-1.py" file to generate the email and password requested in part 1.

Out[87]:

	E-Mail Addresses	Passwords
0	nelsonstacey@hotmail.com	fJHj0GjQ+v
1	caseyking@yahoo.com	_P6(ReQcrX
2	elizabeth64@kim.net	Q2T5c56v&U
3	logangreen@mendoza-richmond.com	NcD30UC1H\$
4	gillkenneth@berg.biz	I3#HbkGRIL
5	wkidd@yahoo.com	Fn4#7Mcn3u
6	cnewman@barnes-newton.com	+YS_P7UaE_
7	fnvlica@hammond-read.com	v8l1Qlwir X

The desired data was kept in a dataframe.

After this Run the code in the "Login.py" file to generate the tables on pgAdmin4.

After this Run the code in the "TASK-5A.py" file to insert the values to the tables on pgAdmin4.

```
1 select * from "Login"
```

Data output Messages Notifications

	E-Mail Addresses text	Passwords text
1	chadellis@mora...	z0_VDpb7+b
2	maddenrita@ya...	03qSR#Nar#
3	ericlee@arnold...	v7EsFbug...
4	jimenezalyssa@...	ziJ+7@Pa(G
5	angela35@gmai...	0*o2tEgy(1
6	gregoryholmes...	Up2RUFxa2^
7	melissaflores@...	z13aVrHk&*
8	mccartydaniel@...	9s51W\$rg^
9	martindouglas...	z%6fBiL4SU
10	xrush@gmail.co...	W^b7#e1g...
11	grivera@hotmail...	xUhEqr%H)4
12	nicholsjennifer...	Q9DMRA7f...

Part 2 is over.

After this, we choose a 1000 e-mails and password from the dataframe

```
B=(A.sample(n = 1000))  
print(B)
```

	E-Mail Adresses	Passwords
7099	qleonard@gmail.com	0\$@F@!n#\$F
5588	justin72@hotmail.com)#tO_2Say4
4996	johnhutchinson@smith-gill.com	^8\$AlKTq_u
2937	johnsonjesse@lutz-waters.com	UbK)8E8st\$
3407	heatherscott@yahoo.com	^gZ8Hca+0F
6866	samuelramirez@yahoo.com	5Pz*V4TmHl
945	patricianguyen@hart-rice.info	_91TklIpns
4692	bwright@hotmail.com	@qSnRZxT00
1216	castanedalynn@hotmail.com	AvNLLMjn*6
9452	burnsdiane@gmail.com	&eXiT@CD9J
3428	samuel80@yahoo.com	+I2GH\$8ma_
8034	john97@hotmail.com	d@7Ns_Fsw(
2259	samanthawhite@james.com	w\$H6Yt_1C*
8540	robertmoyer@williams.org	7&z@^wBi%I
5891	tinaguzman@yahoo.com	SpG4A7Yr*4
1466	jacobsjeffrey@yahoo.com	e*5LN(plfV
5908	william90@davila-thompson.com	Enh@9\$Dyp&
3462	anthony17@weiss.biz	5P^)^mYHn*K


After this, we generate 10000 new data from e-mails and passwords and we check the same results in “checking.ipynb” file

```
if e_mail_adresses[i]==e_mail_adresses[k]:  
    print(e_mail_adresses[i])  
end_time=time.time()  
print(end_time-start_time)
```

```
nsmith@gmail.com  
nsmith@gmail.com  
nsmith@gmail.com  
andreasmith@hotmail.com  
ejohnson@yahoo.com  
ijohnson@gmail.com  
gpeters@gmail.com  
pgreen@hotmail.com  
stephaniejohnson@yahoo.com  
smithmatthew@hotmail.com  
ysmith@yahoo.com  
ysmith@yahoo.com  
david76@yahoo.com  
lpatel@gmail.com  
ucarter@hotmail.com  
qjones@hotmail.com  
jamesfields@yahoo.com  
vasquezmatthew@yahoo.com  
mark25@yahoo.com  
15.494842767715454
```

And we calculate time = 15,494842 sn

After this we insert the values to the SQL

	E_Mails [PK] character (100) 
18	mempuchminda@gmail.com
19	nroberts@yahoo.com
20	david60@hotmail.com
21	grivera@hotmail.com
22	jlewis@yahoo.com
23	xlee@gmail.com
24	bpatel@yahoo.com
25	ismith@yahoo.com
26	ldavis@hotmail.com
27	eanderson@gmail.com
28	qparker@gmail.com
29	hilljennifer@hotmail.com
30	smith@outlook.com