(1) Hider:

Hider renamed as Key is a program that safeguards my personal files. It checks the encrypted form of user input with the already defined password, Since the passsword and the files hidden are both in the encrypted form, It is not easy to get the data even if the source code is exposed. The encryption algorithm being defined in a different location adds further security to the files.

(2) FlushDns:

This program is used to clear the DNS cache which boosts up the internet speed. Before this program was created, a wide range of steps in user interface or the command line has to be executed which was time consuming. This program automates the "ipconfig /flushdns" command.

(3)Encrpyt:

This Program gets a user input and encrpts it using a predefined key. Under special cases, it can also encrpyt a message based on a user-defined key.

(4)Encode:

Encode is also an encryption program. Messages encryted through this program can also be decoded using another program. It works on the principle of caesar cipher.

(5) Decode:

Decode is a decryption algorithm used to decode messages encrpyted using encode. It also works on the principle of caesar cipher.

Encode, Decode and Encrypt. All these 3 algorithms used in a specific order yields a stronger algorithm. One of such combinations is used in "KEY" to protect my password.

(6) Pseudo Password:

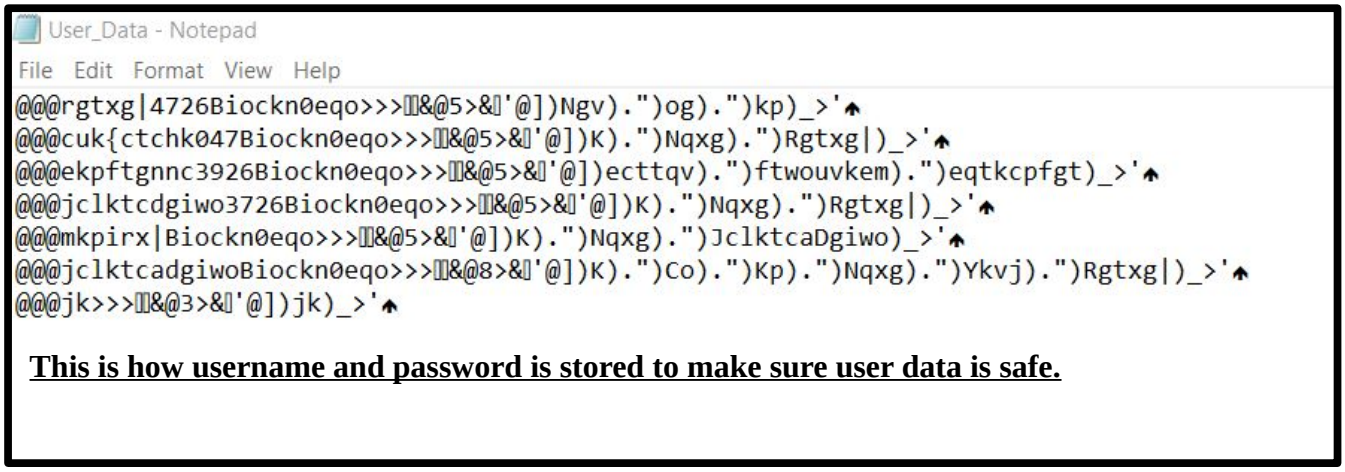
Pseudo Password Alogorithm is one of my hypothesis to create a much more secure password access method. Unfortunately it is found that the total number of combinations doesn't change leading to the same security level as before.

(6.1) SignUp:

This program creates a new account where in the user data is stored as encrypted texts with user defined levels of security.

(6.2) Login:

This program is used to login into an account.



(7)Drag_On_Auxillary:

Drag_On is an AI framework which is currently in the NLP stage.(Natural Language Processing). This framework was completed after 2 years and is expected to grow from NLP to Machine_Learning and further into AI.

(7.1)Drag_On Files Copier:

Used to copy records from level_1_ to level_2_.

(7.2)Drag_On Inherit 1, 2 and 3:

Used to copy records from level_2_ to level_3_, level_3_ to level_4_ and level_4_ to level_5_ respectively.

(7.3)Drag_On File Sorter:

Used to sort files.

(7.4)Drag_On Clear All:

Used to clear all history and records from all levels.

Drag_On writes all the processes and user statements in Master_file_1_ automatically. Drag_On Sorter sorts the statements in the master file as Interactive_Mode_1_, Cmd_Mode_1_ , Modular_Files_1_ ,Spexec_Files_1_.

Drag_On_Inherit 1 ,2 and 3 copies all the files to different levels.

Thus this enables the back up system to have different sets of data at different points in time. Drag_On sorter and inherit programs have been scheduled to run automatically after a specific time interval.

(8)Drag_On_AI:

Drag_On is an machine learning AI framework which is currently in the NLP stage. It took 2 years to complete the framework. It consists of different modes like "Interactive_Mode", "Cmd_Mode" and "Spexec_Mode" each of which has it's own purpose. It is designed in such a way that all activities like learning new stuff, modifying

and updating the outdated and deleting unwanted stuff from memory can be done within the command line without disturbing the other processes. Currently it is learning to use mathematical operations by breaking down and replacing a given sentence until no keyword is left in it.

Eg:

The sentence "add 7 ,8 and 9 and subtract 6 and add 18" is interpreted as:

Step-1: *"24 and subtract 6 and add 18"*

Step-2: *"18 and add 18"*

Step-3: *"18 and plus 18"*

Step-4: *"36"*

(9) PVZ_Functions:

PVZ_Functions is an integrated set of functions to ease programming by either creating functions or renaming complex built-in functions which are hard to remember. All the functions can be accessed in a program by adding only 3 lines of code above all other code and prefixing the function name with "P.".

(9.1) Modules Import Area:

In this section, all the required libraries are imported and hence they need not be imported again in the file we are working in.

(9.2) Character_Recog_Functions:

***new_person()*** *used to invoke Drag_On to give restricted access to information.*

(9.3)Date&Time_Functions:

These contains a list of 10 functions which display date and time in different formats since all the arguements for different syntaxes could easily be forgotten. Eg: It is easy to call ***P.minutes()*** *rather than* ***time.strftime("%M",time.gmtime)***

(9.4)File_Operation_Functions:

Functions in this section are used to perform all sorts of activities related to files. Some of them are:

***fatt()*** *used to change the attribute of a given file as hidden, read-only or normal. It is one of the functions used in "Key".*

***extract()*** *is used to access selective data from a txt file.* ***invert*** *and* ***reverse*** *are fucntions used in extract and this function is essential in all my programs which save user information. Data is stored in between certain symbols.* ***Eg:*** *In this pic keywords are enclosed between "^@^^#" and "#^^@^" and type is stored between "+|>" and "<|+".Extract takes the file name and starting symbol as arguements and gives all data within a file enclosed between the symbols.*

(i.e) P.extract("data.txt","^@^^#") gives a list of all keywords

```
^@^^#hi#^^@^     +|>greeting<|+  )-)hi.py(-(
^@^^#hello#^^@^  +|>greeting<|+  )-)hi.py(-(
^@^^#bye#^^@^    +|>! greeting<|+        )-)bye.py(-(
^@^^#add#^^@^    +|>mathematical<|+      )-)add.py(-(
^@^^#subtract#^^@^      +|>mathematical<|+      )-)subtract.py(-(
```

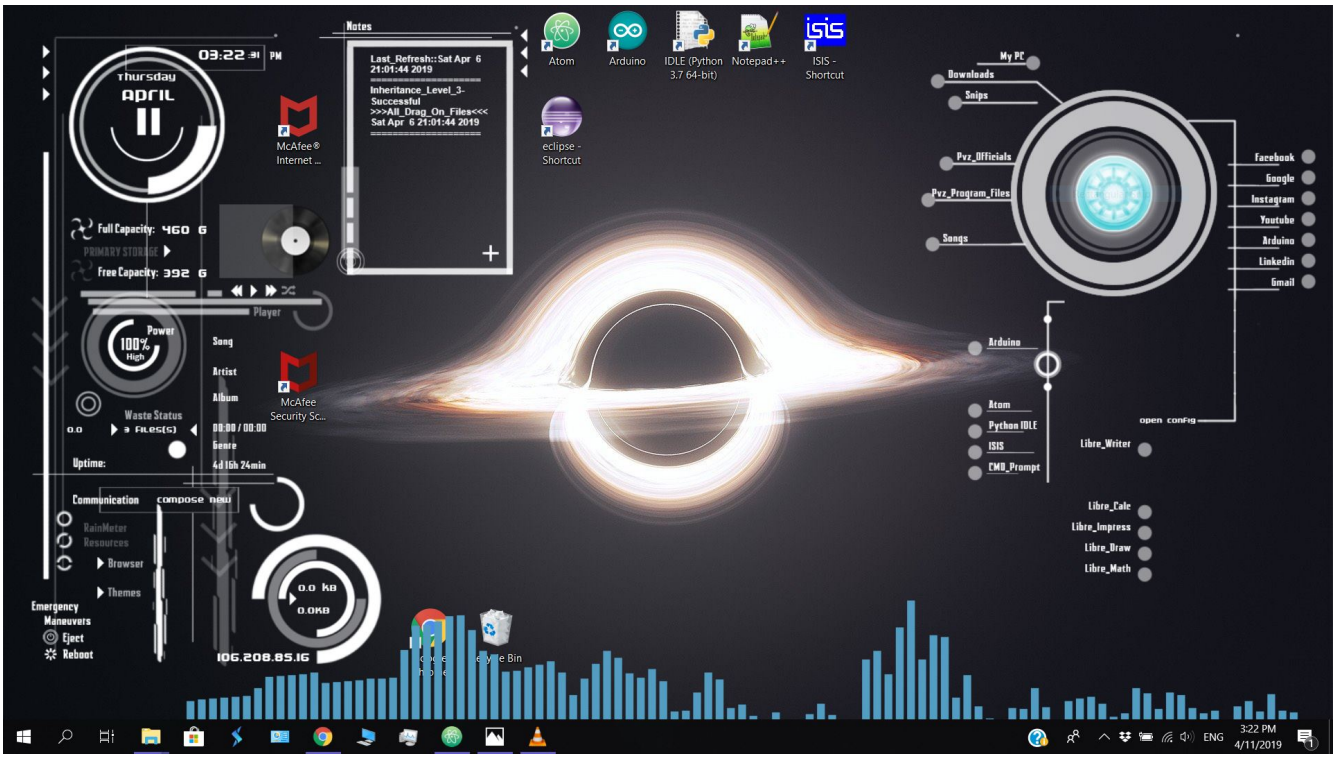
(9.5) Cipher_Functions:

*# **encode** and **decode** use a caesar cipher technique to shift letters exactly to the same extent in opposite ways.*

*#**one_way_encrypt** encrypts the given input in a irreversible manner which can only be used to compare and get results which means that the key before encryption cannot be obtained.*

(9.6) Rainmeter_Functions:

RainMeter is a software for desktop personalization. However since it is open-source. I use it to create shortcuts and also to customize my destop for easy access.



This is how my desktop looks like and the white area was merely a notes.txt file.

*To acknowledge the efficiency of background data, functions like **Notif** and **Clear_Notif** have been of great use. Everytime background automated processes like Drag_On_File_Sorter or Inherit runs, The result of those actions are reflected in the desktop notes window and is also stored in the history file. Thus bugs or certain unexpected exceptions are foundout and eradicated making my programs more and more efficient.*

(9.7) Arduino_Functions:

*# **ardata()** is used to get data from the serial monitor of a arduino taking only COM port as its arguement.*

*# **filter()** is used to filter the escape sequence characters providing readability of code.*

*# **compress()** is used to replace sequential repeated set of data by a single data.*

Eg:

[12,12,12,12,13,14,14,15,15,15,16,17,18,0,0,19] yields [12,13,14,15,16,17,18,0]

(9.8) Common_Functions:

This contains fucntions that doesn't fall into any group.

Eg:

***wesys()** displays a number in western decimal system "987,654,432"*
*while **insys()** yields "98,67,54,432"*
***colour()** displays the text with a different colour in the console.*
***cmd()** is used to run a DOS command within python shell.*