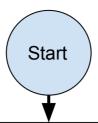
## **Integrity Plus**



#### Ask user what they want to do:

- A. Collect new Hash Database, or
- B. Begin monitoring files with saved Database

#### Collect new Hash Database

- Calculate Hash value from target files
- 2. Store the file|hash pairs in Data.txt

## Begin monitoring files with saved Baseline

1. Load file:hash pairs from Data.txt

## Continuously monitor file integrity

1. Loop through each file target file, calculate the hash, and compare the file|hash to what is **Data.txt** 

### Notify user if a file is changed or deleted

1. If a file's actual hash is different than what is recorded in the baseline, print to the screen (color), if a file has been changed or deleted. (integrity compromise)

# Data.txt

ile Edit View

F:\isos\archlinux-2022.11.01-x86\_64.iso | C908F303E24208691CA8CD4424C998E0

F:\isos\debian-11.6.0-amd64-netinst.iso | E900FF4A1988CF3ED3AA7BF096E2F32B

F:\isos\EndeavourOS\_Cassini\_Nova-03-2023.iso | 9B1C94FFBABC58B91348DC049604F76C

F:\isos\EndeavourOS\_Cassini\_Nova-03-2023.iso.torrent | C555849E287BE5E97211A0048C2F18DB

F:\isos\OSSIM.iso | 25B42E54F846A75BBE59ABA97A2A1FEA

F:\isos\pop-os\_22.04\_amd64\_intel\_25.iso | 9986BF6DE775AC6144BB8B28807B263B

F:\isos\tails-amd64-5.9.img | 1A7E280BBD68217731B9F0A18<u>E</u>21EFEE

F:\isos\ubuntu-mate-22.04.2-desktop-amd64.iso | 1CE918F78CC5993BA6EFF3E07035FD7E

As we see the File Path and the hash Values are separated with a " | " Symbol Which actually splits the whole line to a Key, Value structure.