**Problem Statement:**

* Deciding directories to store files or folder is a cumbersome task. We would make an Operating system to relocate files from irrelevant directory to a relevant directory with the help of AI.

**Objective:**

* Making an optimized and light weight OS
* Pattern matching
* Segregation

**Methodology:**

* Design a terminal-based OS.
  + Bootloader
  + Bootstrapping
  + File system
  + Memory Management (Optional)
* Develop an AI tool which will be inbuilt in our OS will segregate files and folders with the help of an algorithm.
* The algorithm will segregate or differ files and folders using file name pattern and contents inside the files.
* A log file will be generated for all the files which will track all the segregation and relocation of the file and folders.

**Result & Discussion:**

* Reduce time for organizing files and folder
* Locating files and folder would be easier.
* Files and folders would be segregated automatically.

**Introduction:**

* Most of the Laptop’s desktops are filled with random files and folders and day by day it becomes a very difficult and time-consuming task to segregate those files and folder into their respective relevant directories. So, through our AI based OS this task will be automated and will reduce the human job and time.

**Abstraction:**

* The optimized and light weight Operating System will be made using CPP language. Kernels and bootloader will be bootstrapped. An inbuilt AI tool will be made to segregate files and folders from various location automatically. The log file will be generated automatically and will be updated automatically after every relocation of file or folder. The log file will something similar to the log file of git commit.

**Title:** Design an AI based optimized and light weight OS.