

HOMework-6

The file extension is separated from the file name with a '.' at the end of the file name. By looking at this file extension, the file can be understandable what kind of file it is (video, photo, etc.). This is how the operating system looks at the type of file based on its extension.

If we make the extension of a text file 'mp4' instead of 'txt', the operating system will understand this file as a video and use a video opening program to open the file. The program will throw an error.

The file extension cannot be relied upon to find out the type of a file. To find out the actual type of the file, we need to examine the header of the file. If there is no header, this file is a text (txt) file or some other type of it. If the file contains video, photo etc., this file has a title.

For example, the first 4 bytes of each .mkv video file are "1A 45 DF A3". By looking at these 4 bytes, it can be determined whether the file is an mkv file.

In the program, the file path will be given as input and the file will be returned as true if it is a "png" file, and false if it is not.

You can check the <https://www.filesignatures.net/> site to learn the titles of the file types.

Example program input and output:

```
Enter file path: logo.png
logo.png file is a PNG file.
```

```
Enter file path: written_file.png
logo.png file is a PNG file.
```

Application of homework:

Python 3.7 will be used in this assignment. No library will be used.