

# Probability Software Assignment

Name -: Kedareswar Kondakavuri

Roll no -: CS22BTECH11033

**Abstract**—In this assignment we made a Music player in python which uses numpy module of python to shuffle the songs.

## Introduction:

This report analyzes a Python script that implements a simple music player using the Pygame and Tkinter libraries. The script allows the user to play songs randomly from a specified music folder.

## Explanation:

The Python script begins by importing the necessary libraries: `os`, `numpy`, `pygame`, and `tkinter`. It then initializes the Pygame mixer.

Next, it defines the music folder path and retrieves the list of music files from that folder. The script shuffles the files randomly using the `numpy.random.permutation` function.


The script includes two main functions: `play_song` and `next_song`. The `play_song` function retrieves the index of the current song, loads the corresponding music file using Pygame, and plays it.

The `next_song` function stops the currently playing song, increments the index, and checks if all songs have been played. If all songs have been played, it updates the GUI label to display a completion message. Otherwise, it updates the current song index and calls the `play_song` function to play the next song.

The main part of the script creates a Tkinter window and adds a label to display the current song index. It also includes buttons for playing the current song and moving to the next song.

## Conclusion:

The Python script provides a basic music player interface using Pygame and Tkinter. It allows the user to play songs randomly from a specified music folder. The code can be further extended and customized to add more features and functionality to the music player.



```
kedareswar@eswar:~/randomsong$ python3 a.py
pygame 2.4.0 (SDL 2.26.4, Python 3.10.6)
Hello from the pygame community. https://www.pygame.org/contribute.html
kedareswar@eswar:~/randomsong$
```

Fig. 1: Random song