# Software Assignment
## AI1110: Probability and Random Variables
### Indian Institute of Technology Hyderabad

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### Playing songs from a playlist after shuffling

(i) **Summary:** This project presents a Python script designed to play songs in a shuffled order. The script utilizes the power and flexibility of Python programming to create an efficient and enjoyable music playback experience. This report outlines the project's methodology, implementation details, and the results obtained from the script.

(ii) **Working Procedure:**
This python script uses os module to return the list of songs from songs directory. Then it uses numpy module to pick a random song from the list. pygame module is used to load and play a random song from the list using mixer methods.
If all songs are completed then songs will play again till you stop it.
I used tkinter for the interface.
In interface there are play,pause,resume,next,stop options.

(iii) **Result:** Upon running the Python script, the shuffled song playback functionality is observed. The songs are played in a random order. Users can enjoy a unique listening experience with songs they may not have encountered in a sequential playback.
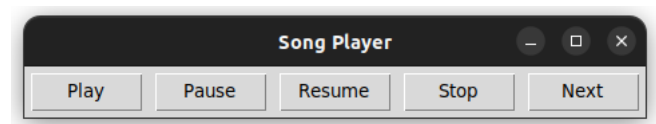
(iv) **Conclusion:** In conclusion, the Python script developed for shuffled song playback offers an alternative and exciting approach to music listening. By leveraging Python's versatility, the script randomizes the song order, providing users with an engaging and varied playlist experience. The script can be further enhanced by incorporating features like genre-based shuffling or intelligent song recommendations, thereby elevating the music playback experience to new heights.

(v) **Modules used:**
   a) numpy
   b) os
   c) pygame
   d) tkinter

(vi) **Images:**

```
Hello from the pyg
audio10.mp3
audio4.mp3
audio8.mp3
audio9.mp3
audio2.mp3
audio18.mp3
audio15.mp3
audio6.mp3
audio14.mp3
audio5.mp3
audio17.mp3
audio1.mp3
audio12.mp3
audio3.mp3
audio13.mp3
audio11.mp3
audio7.mp3
audio19.mp3
audio16.mp3
audio4.mp3
audio9.mp3
audio12.mp3
audio14.mp3
audio13.mp3
audio5.mp3
```