

# Random Numbers Software Assignment

N.Keerthana  
CS22BTECH11043

## 1.Introduction:

This report includes the details of the python code written to create a playlist of 20 songs where songs are randomly played. This playlist has basic inputs like pause, resume and next.

## 2.Overview:

- 1.Import the necessary modules random for shuffling the the files and pygame for playing audio files.
- 2.A play-audio function is defined for loading and playing files using Pygame mixer.
- 3.Then a list file-names is defined that contains all the audio files randomly.
- 4.Pygame library is initialized using pygame.init().
- 5.Then first file is played using play-audio function.
- 6.A variable is-paused is declared to track the current playback state.
- 7.Then an infinite loop is created on which the file index increases by one every time loop repeats and continuously keeps playing audio.
- 8.Prompt for inputs like pause, resume, quit and next is given to user .
- 9.Input for next, pause, resume and quit are **n,p,r** and **q** respectively.
- 10.Pause and resume are executed by `pygame.mixer.music.pause()` and `pygame.mixer.music.unpause()` functions respectively.

## 3.Conclusion:

In conclusion, the provided code demonstrates the application of random number generation in the context of creating a playlist. By shuffling a list of audio file names, the code randomly selects and plays one audio file at a time. This showcases how random numbers can be utilized to create dynamic and varied playlists. This example highlights the versatility of random number generation in real-life applications.

#### 4.Images:

```
keerthana@keerthana-HP-Pavilion-x360-Convertible-14-dh2xxx:~$ python3 b.py
pygame 2.4.0 (SDL 2.26.4, Python 3.10.6)
Hello from the pygame community. https://www.pygame.org/contribute.html
Now playing: 18.mp3
Enter 'p' to pause, 'r' to resume, or 'n' to skip to the next audio and q to exit playlist: n
Now playing: 9.mp3
Enter 'p' to pause, 'r' to resume, or 'n' to skip to the next audio and q to exit playlist: p
Audio paused
Enter 'p' to pause, 'r' to resume, or 'n' to skip to the next audio and q to exit playlist: r
Audio resumed
Enter 'p' to pause, 'r' to resume, or 'n' to skip to the next audio and q to exit playlist: q
keerthana@keerthana-HP-Pavilion-x360-Convertible-14-dh2xxx:~$
```

Fig. 1: User Interface