

# Application of ML in Practicing Tables

Recordings of sounds of numbers are stored in folder named “number”. A file named “1.wav” has audio recording of number 1 etc. Besides recordings of sounds of multiplication are stored in folder named “times”. Thus a file named “3.wav” has audio recording that says “threes are” and so on. There are also audio recordings in folders named “correct” and “incorrect”. The audio recordings in correct folder have sounds like

- Good job
- Correct
- Yes etc.

The audio recordings in incorrect folders have sounds like

- No
- Incorrect
- Wrong etc.

The program generates a random number between 1 and 10 (or 30), say  $n_1$ . It then plays the file  $n_1.wav$  from the folder “number”. It then generates another random number between 1 and 10, say  $n_2$ . It then plays the audio from the file  $n_2.wav$  in the folder “times”. Thus if  $n_1 = 3$  and  $n_2 = 5$ , the program will effectively play:

“three fives are”

It prompts user to say the answer. It listens to user’s answer and queries the trained audio model with the listened audio. It gets the classification label – which is a number, say  $n_3$  – from the trained model for the listened audio of the answer obtained from the user. It then compares user’s answer with the actual answer. If it is correct, the program picks up a random recording from “correct” folder and plays it. If it is incorrect, the program picks up a random recording from “incorrect” folder and plays it. It is followed by playing the  $n_1.wav$  from “number” folder,  $n_2.wav$  file from “times” folder and  $n_3.wav$  file from “number” folder. Thus if the answer is correct, the program will play

“good job. Three fives are fifteen”