In order to run the code, go to HW2.c I use the UART code and UART.c and UART.h which will be attached to the zip file. When the program starts the user will be asked to select which of the 3 options they wish to choose from all the user has to do is enter a number and then the code will see if they entered a number between 1 and 3. If the user selects 1 the code will print to the UART all the song titles. If the user selects 2 the code will then ask whether the user wants to play a song or search for a song the code right now can only play the song so select 1 and then just enter 1 through 4 to play a song. The code will print out the notes of the song. If the user selects 3 from the main menu the code will ask which song the user wants to change enter 1 through 4 then the code will ask the user what's the title of the song after the user has entered the title they desire they must hit enter to continue. Then the code will ask for the notes and duration of the new song. The user is done entering in the song again they must hit enter for the song to be saved. If the user enters 3b3r0 or b32r0 the song will not be saved and it will be blank when the user tries to play the song.

Driver

Because I use the UART you can enter this into the UART and you will see the code works properly:

UART prints:

- -----Main Menu-----
- 1. List songs
- 2. Play song
- 3. Create Song

User Enters 1(don't need to hit enter)

UART prints:

- 1. Hot cross buns
- 2. Hot potato pie
- 3. Twinkle twinkle
- 4. Three blind mice
- -----Main Menu-----
- 1. List songs
- 2. Play song
- 3. Create Song

User Enters 2(don't need to hit enter)

UART prints:

- ----Play Song Menu---
- 1. Play by number
- 2. Search By Title

User Enters 1(don't need to hit enter)

UART prints:

Which song

- 1. Hot cross buns
- 2. Hot potato pie
- 3. Twinkle twinkle
- 4. Three blind mice

User enters 1-4

UART prints:

Song user selected

- -----Main Menu-----
- 1. List songs
- 2. Play song
- 3. Create Song

User Enters: 3(don't need to hit enter)

UART Prints:

- ---Which song would you like to replace (Enter 1-4)----
- 1. Hot cross buns
- 2. Hot potato pie
- 3. Twinkle twinkle
- 4. Three blind mice

User Enters 1-4 (don't need to hit enter)

UART prints:

What is the title of the song?

User enters title (when done hit enter)

UART prints:

Enter song

User enters song Ex: A2B3A5R5(when done hit enter)

UART prints

- -----Main Menu-----
- 1. List songs
- 2. Play song
- 3. Create Song

User Enters: