

### Music Note Spreadsheet - Project 3

```
Struct note {Frequency, Duration}
```

#### Twinkle twinkle little star

```
CC GG A A G,  
FF EE D D C,  
GG FF E E D,  
GG FF E E D,  
CC GG A A G,  
FF EE D D C
```

```
freq[note.frequency]
```

Note.frequency	freq
A = 0	220
B = 2	246
C = 3	261
D = 5	293
E = 7	329
F = 8	349
G = 10	391

```
//Struct for frequency and duration
```

```
struct note{  
    int freq;  
    int duration;  
};
```

```
int myDurations[3] = {1,2,4};  
int TotalDuration = 200;  
int currentNote = 0;  
float ThTlConst = 1.0;
```

```
//We did twinkle twinkle little star
```

```
struct note mySong[] = { {3,1}, {3,1}, {10,1}, {10,1}, {0,1}, {0,1}, {10,0},  
{8,1}, {8,1}, {7,1}, {7,1}, {5,1}, {5,1}, {3,0},  
{10,1}, {10,1}, {8,1}, {8,1}, {7,1}, {7,1}, {5,0},  
{10,1}, {10,1}, {8,1}, {8,1}, {7,1}, {7,1}, {5,0},  
{3,1}, {3,1}, {10,1}, {10,1}, {0,1}, {0,1}, {10,0},  
{8,1}, {8,1}, {7,1}, {7,1}, {5,1}, {5,1}, {3,0} };
```

```
int F[12] = {220, 233, 246, 261, 277, 293, 311, 329, 349, 369, 391, 415};  
char myKeypad[17] = {'1', '2', '3', 'A', '4', '5', '6', 'B', '7', '8', '9', 'C', '*', '0', '#',  
'D'};
```

```
int freq[TOTAL_NOTES] = {220, 233, 246, 261, 277, 293, 311, 329, 349, 369, 391, 415};
```

A	A#	B	C	C#	D	D#	E	F	F#	G	G#
0	1	2	3	4	5	6	7	8	9	10	11