

1. In this question, we'll use PWM module to turn on the buzzer for playing the sound “The Four Seasons: Autumn” by “Antoni Vivaldi”. For this task, the first step is to define the proper periods in which the PWM is high. A list of proper frequencies is available online. We defined frequencies as:

```
#define A 440  
#define a 440  
#define B 493.883  
#define b 494  
#define c 262  
#define C 277.182  
#define D 311.127  
#define d 294  
#define E 329.628  
#define e 330  
#define f 349  
#define F 369.994  
#define g 392  
#define G 415.305
```

The next step is to turn on the buzzer for proper periods. This can be done by assigning a proper value inside the infinite loop:

```
// E4  
buzzer.period(1.0/E);  
buzzer = 0.5;  
wait(0.3);  
buzzer = 0.0;  
wait(0.05);
```

This pattern repeats for the whole song.