

## Lesson 5: Worksheet 5.5 – Challenge! Dance to music

Dancing is more fun with music! In this activity, you will write a program combining dance moves with some tones or a tune.

### Your turn:

Write and run the following program that combines a ‘shimmy’ dance with some tones:

```

1
2 #-----Setup-----
3
4 import Ed
5
6 Ed.EdisonVersion = Ed.V2
7
8 Ed.DistanceUnits = Ed.CM
9 Ed.Tempo = Ed.TEMPO_MEDIUM
10
11 #-----Your code below-----
12
13 #Set up my variables
14 turnSpeed = Ed.SPEED_9
15 degreesToTurn = 60
16 numberOfTwists = 3
17
18 #Now dance to the music!
19 Ed.Drive(Ed.SPIN_RIGHT, turnSpeed, degreesToTurn/2)
20 Ed.PlayTone(Ed.NOTE_C_7, Ed.NOTE_SIXTEENTH)
21 for i in range(numberOfTwists):
22     Ed.Drive(Ed.SPIN_LEFT, turnSpeed, degreesToTurn)
23     Ed.PlayTone(Ed.NOTE_A_7, Ed.NOTE_SIXTEENTH)
24     Ed.Drive(Ed.SPIN_RIGHT, turnSpeed, degreesToTurn)
25     Ed.PlayTone(Ed.NOTE_C_7, Ed.NOTE_SIXTEENTH)
26 Ed.Drive(Ed.SPIN_LEFT, turnSpeed, degreesToTurn/2)
27 Ed.PlayTone(Ed.NOTE_A_7, Ed.NOTE_SIXTEENTH)
28

```

Now design your own dance for your Edison, adding some tones or using a tune string. Can you synchronise it so Edison dances in time with the music?

1. Describe your robot's dance moves. Is there anything in your program you really liked? If so, describe it.

Name \_\_\_\_\_

2. What combination of tones or notes did you play along with your dance?