

# SONIC PUZZLE #1

Type this into sonic Pi, and click  What tune do you hear?

**2.times do** 

**play 60**

**sleep 0.5**

**play 62** 

**sleep 0.5**

**play 64**

**sleep 0.5** 

**play 60**

**sleep 0.5**

**end** 

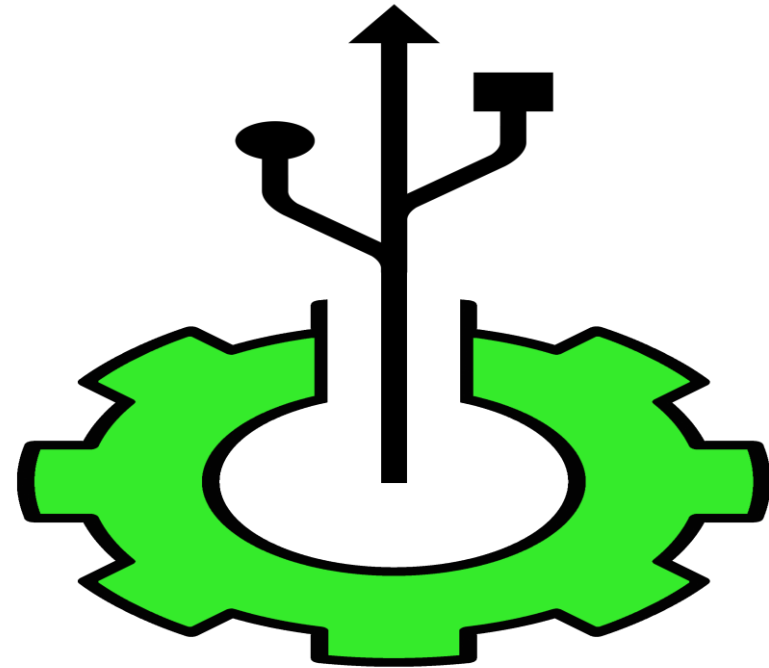
This line tell sonic pi to do this whole list twice. How many times do you think it would play if we changed it to **5.times do**? If you said 5; you're right!

**play** tells SonicPi to play the note on the MIDI scale (Musical Instrument Digital Interface). **Play 60** tells Sonic Pi to play 'Middle C'.

**sleep** tells SonicPi to rest for that many seconds. Here we are asking SonicPi to wait for half a second.

Knowing what the tune sounds like and what the MIDI note numbers are, can you program the rest of the tune?

# SONIC PUZZLE #1



HackLab  
think.hack.make.do.

HINT (FOR CHEATERS!):

CDECCDECEFFGGFFGGAGGFECCDECCDEC

# SONIC PUZZLE #2

Old McDonald had a farm...

What if I told you that you could get SonicPi to play whole song in just one line of code?

It's this one:

**play\_pattern[x,y,z]**

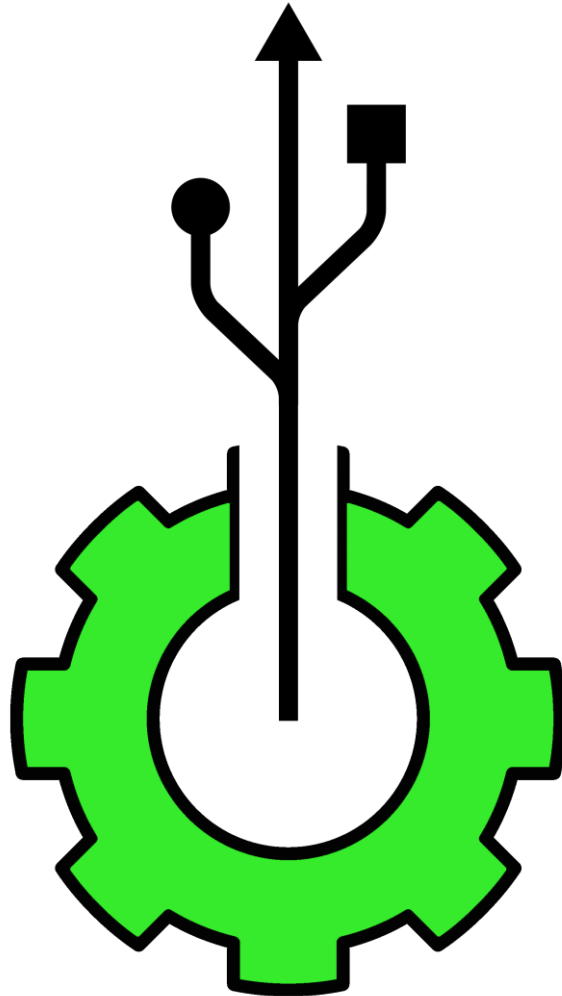
What this does: takes all the note numbers you put inside the square brackets and plays them one after another in that order.

So; play 60      can more easily be written as play\_pattern [60,70,75]  
    play 70  
    play 75

Old McDonald goes like this: G,G,G,D,E,E,D,B,B,A,A,G

The MIDI note values are : C    D    E    F    G    A    B  
                          60  62  64  65  67  69  71

Can you code the tune?



HackLab

think.hack.make.do.

# ***SONIC PUZZLE***

## ***#2***

## ***SONIC PUZZLE #3***

Mozart wrote 'Twinkle, Twinkle, Little Star' when he was an infant.  
Surely you can do it?

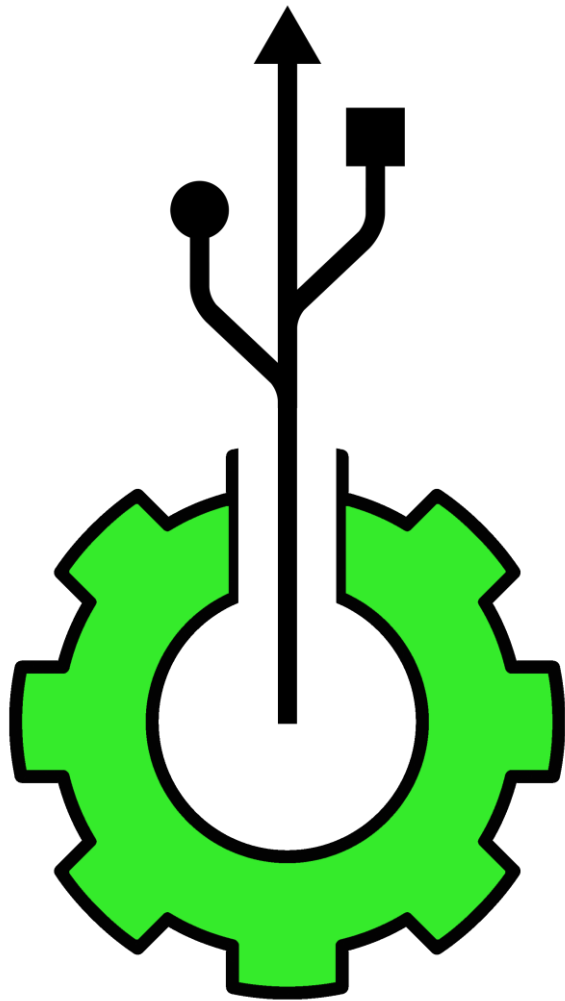
The MIDI note values are :

C	D	E	F	G	A	B
60	62	64	65	67	69	71

The song starts off: C C G G A A G

Can you code the rest of the tune?

Use command **play\_pattern [60,60,67...]** to write the tune, by writing the numbers in the brackets. The first three have just been done for you!



HackLab  
think.hack.make.do.

# SONIC PUZZLE #3

CGGAAGFFEEDDCGGFF  
EEDGGFFEEDDCGGAAG

HINT (FOR CHEATERS!):