

### Learning Intention

- **Sequencing** : In this lesson, we continue our first steps into understanding computer programming. We are looking at how computers need precise instructions to execute and you will add to the sequencing you did in your first program.

### Success Criteria

- Create a working program in Scratch, which carries out the instructions to play the song *Frère Jacques* in the correct order. Then do the extension tasks to add another layer to the song.

### Lesson Information

If you missed last week's lesson, you'll need the file we worked with.

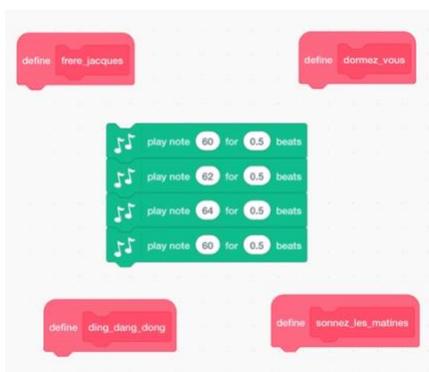
Use this link to find the file - <https://scratch.mit.edu/projects/483339982/>

If you already did the first part of the lesson last week, miss out the steps below and go to the [Explorer Task](#).

1. First, move the red blocks into the correct sequence so that the lyrics to the song *Frère Jacques* are in the correct order. The first line has been done for you below.



2. Listen to each block of music sequence (the green blocks) by using a single click on the block.



Place the green block under the appropriate heading. e.g this block goes here...

(Remember, when you want to move a block, you have to grab the top script of that block).



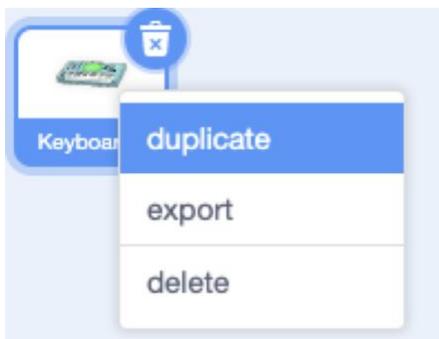
3. Once you have added the green blocks to the red heading, it's time to press the **Green flag** on the top right-hand side of the screen to listen to your program play. Does it sound the way it should?

Good luck making beautiful music!

### Explorer Task

A round is to play or sing the same melody but start at different times. Frère Jacques is perfect for this. The second instrument would start playing once the first instrument has finished the first two lines of Frère Jacques.

The first task is to 'duplicate' the piano and all of the code that you have placed in the correct order.



In Scratch you can use the **Broadcast** block to send a message to other sprites in your program to make them run code.

1. Make sure the first keyboard sprite is selected, then click on the Events button on the left-hand menu and drag Broadcast message1 into your program.



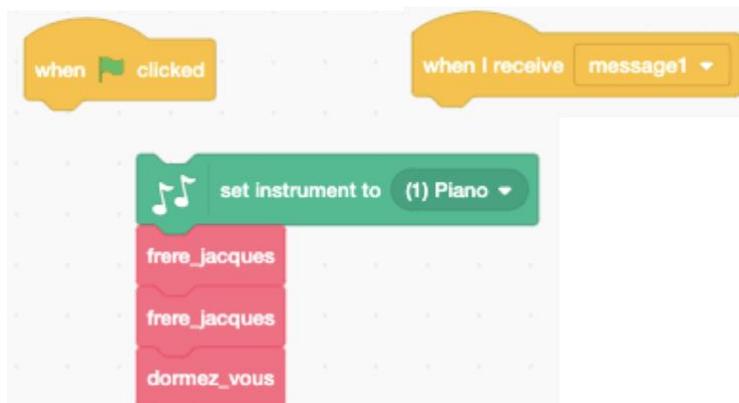
You need your program to broadcast a message when you want the second instrument to start. Place the broadcast block into your code where you would like this to happen.

2. Select your second keyboard.

**Remove** the *When green flag is clicked* block.

Hint: To do this, you need to click and drag the **Set instrument to (1) piano** block away from it.

Attach the Green flag block to the **When I receive message1** block.



Run your program and listen.

Has it worked?

If not, go back to your first keyboard. Are you broadcasting in the correct place?

If it did work, try adding in a third piano.

**Hint:** You will need to broadcast a different 'message 1'. You can create a new message by clicking on the Drop-down arrow next to 'message1'.