



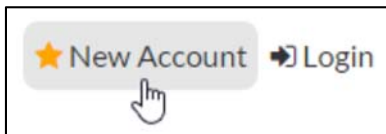
Teaching a Computer to Sing

University of Massachusetts Lowell
Bartlett Community Partnership School

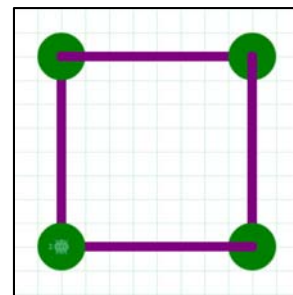
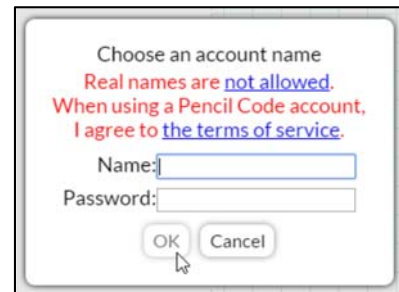


GETTING STARTED WITH PENCIL CODE

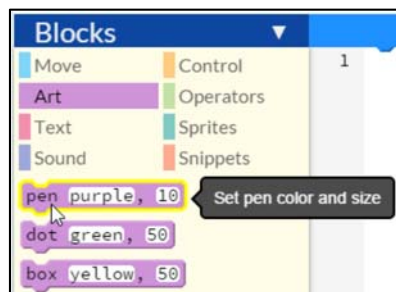
1. Go to the Pencil Code home page at: <http://pencilcode.net>
2. Click **New Account** to create your own Pencil Code account.



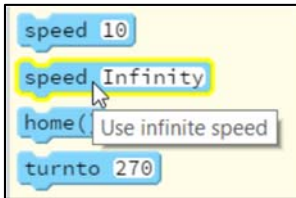
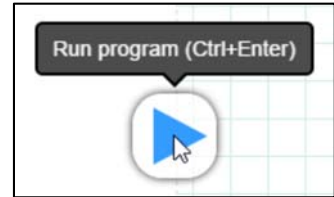
3. Enter an account name for yourself (not your real name) and a password and click the **OK** button.
4. Tell one of the teachers or university students your account name and password to add to their list in case you forget it.
5. Drag various blocks into the coding area (as you did with Scratch) to draw a square that looks like the one below.



The blocks you will want to use are the **fd** (forward), **rt** (right), and **jump to** blocks under the **Move** menu, as well as the **pen** and **dot** blocks under the **Art** menu.



- Once you have sequenced your blocks in the coding area, click the **blue arrow** in the middle of the screen to run your program.
- You can speed up the animation by adding a **speed** block (under the **Move** menu) at the top of your program.



speed 10 will make your program run 10 times faster than normal, and **speed infinity** will make it run as fast as the computer can go.

- As an additional challenge, add blocks from under the **Sound** menu to play notes after each of the corners is drawn.
- Once you do these things, try to make shapes with different numbers of sides or try to “teach the computer to draw” different shapes or figures. See the **Draw** examples by clicking the **Create art** button on the Pencil Code home page for ideas.

