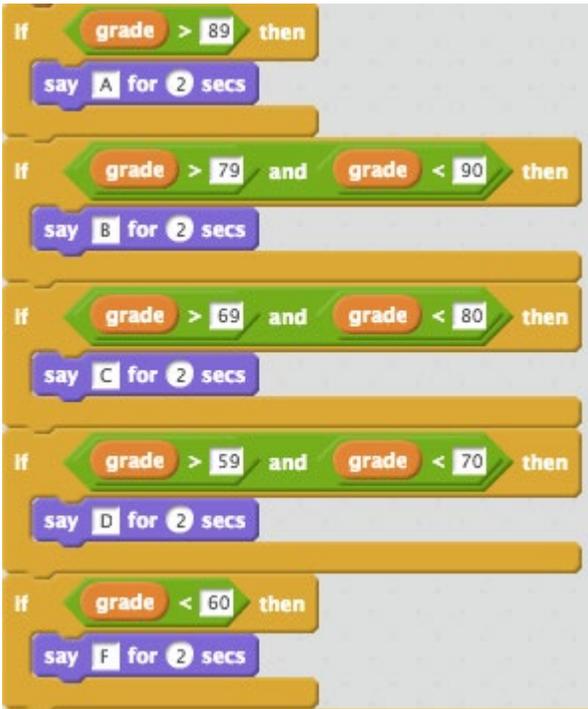


## Translating the Grade Project

- The following Scratch code is a possible solution to the Grade Project. It uses **complex conditionals**. In your own words, what do you think this code does?

**ANSWERS WILL VARY.** SAMPLE ANSWER: It prints the correct grade based on the value of the variable grade.

- Please translate the Scratch code into Arduino. For the “say” block, you may call a say function, for example: `say("A");`

SCRATCH CODE	ARDUINO CODE
 <p>The Scratch code consists of five conditional blocks, each followed by a 'say' block for 2 seconds:</p> <ul style="list-style-type: none"> <li>If <code>grade &gt; 89</code> then say <code>A</code> for 2 secs</li> <li>If <code>grade &gt; 79 and grade &lt; 90</code> then say <code>B</code> for 2 secs</li> <li>If <code>grade &gt; 69 and grade &lt; 80</code> then say <code>C</code> for 2 secs</li> <li>If <code>grade &gt; 59 and grade &lt; 70</code> then say <code>D</code> for 2 secs</li> <li>If <code>grade &lt; 60</code> then say <code>F</code> for 2 secs</li> </ul>	<pre> if (grade &gt; 89) {   say("A"); } if (grade &gt; 79 &amp;&amp; grade &lt; 90) {   say("B"); } if (grade &gt; 69 &amp;&amp; grade &lt; 80) {   say("C"); } if (grade &gt; 59 &amp;&amp; grade &lt; 70) {   say("D"); } if (grade &lt; 60) {   say("F"); } </pre>
<p><b>EXTRA CREDIT:</b></p>  <p>The extra credit block is: If <code>grade &gt; 79 and grade &lt; 90 or grade &gt; 59 and grade &lt; 70</code> then say <code>You qualify for tutoring</code> for 2 secs</p>	<pre> if ((grade &gt; 79 &amp;&amp; grade &lt; 90)    (grade &gt; 59 &amp;&amp; grade &lt; 70)) {   say ("You qualify for tutoring"); } </pre>