

Intro to Programming Scratch #7 - Grades

Objective: Demonstrate your understanding of Scratch variables and conditionals.

1. Login to the Scratch website. Create a new project. Change the name of this project to *first_last_scratch_7*. Click *File->Save now*
2. You are to create a program that will tell the user their grade based on a percentage.
 - a. Add a variable to the program. Name it *percent*.
 - b. Add any Sprite that you want to your project. The cat is fine.
 - c. You must have instructions so that the user knows to click your Sprite. This may be in the form of a second Sprite, or it can be text written on the backdrop.
 - d. When the Sprite is clicked it should
 - i. ask *What is your percent?*
 - ii. set the *percent* variable to be the answer that was received from the user
 - iii. say the following for 2 seconds based on the value of *percent*.

If-then condition	What the Sprite Says for 2 secs
$percent > 100$	You can't have more than 100%!
$percent \geq 90$ and $percent \leq 100$	You have an A.
$percent \geq 80$ and $percent < 90$	You have a B.
$percent \geq 70$ and $percent < 80$	You have a C.
$percent \geq 60$ and $percent < 70$	You have a D.
$percent \geq 0$ and $percent < 60$	You have an F.
$percent < 0$	You can't have a negative percent!

- e. After the above conditional statements, add another if-then block: if $percent > 100$ or $percent < 0$ then, stop this script. (*Stop* is found in the *Control* menu)
 - f. The high school that your Sprite attends is pretty crazy. Students qualify for tutoring only if they have a B or a D. After the Sprite says the grade that you have, have your Sprite say ***You qualify for tutoring*** if the grade is a B or a D. If the Sprite doesn't have a B or a D, your Sprite should say ***You don't qualify for tutoring***.
You must do this in a *single* conditional statement using an if-then-else block. This will be the last block in your script.
3. Always do *File->Save now* before you log out of the Scratch website.

4. Now do *File->Save to your computer*. If you are using a MacBook make sure to save to your flash drive. If you are on a Chromebook, it should download automatically to your downloads folder.
5. Turn in your *first_last_scratch_7.sb3* file to *missblomeyer.com* in the usual way.