

Exercise 5: Declaring and Using Variables and Constants

Clone your repository

1. Accept the assignment to create your repository for submitting your work:
<https://classroom.github.com/a/rilB-p15>
2. In GitHub Desktop, clone the repository you just created to your desktop.

Create your Unity project and prepare for GitHub tracking

3. Use Unity Hub to create a new 2D Unity project named **Exercise5**. Save the project in your new repository folder.
4. Once the project opens in Unity, go to File Explorer and move the **_UnityProjectRoot.gitignore** file into the Unity project folder and rename it to **.gitignore**
5. Go to GitHub desktop and commit your changes with the message: "Create initial Unity project" Make sure there are only about 30 files being committed.
 - a. If you have thousands of changed files, return to step 2 to make sure you've named the gitignore file properly and that it is placed at the root of the Unity project not in its original location. Ask for help if you are unsure.
6. Push your changes to the remote.

At this point you are ready to proceed with this assignment. We encourage you to make interim commits as you go. Use your commit message to indicate which step (e.g.: "Completed through step 5").

Problem – Declaring and Using Constants and Variables

7. In Unity Editor, change the name of **SampleScene** to **Scene0**.
8. Add a Scripts folder and add a new C# script named **PrintPercent**.
9. Open the script, fill in the comment near the top of the script, and delete the **Update** method.
10. Add the following code to the **Start** method:
 - a. Declare a constant named **MaxScore** of type **int** and assign it a value of 100.
 - b. Declare a variable named **score** of type **int** and assign it a value between 0 and 100.
 - c. Declare a variable named **percent** of type **float** and store the percent calculated by dividing score by **MaxScore**. Remember how integer division works in C# and use type casting as appropriate.
 - d. Print the percent in the Unity Console window. The percent you print should be between 0% and 100%.
 - e. Attach the script to the Main Camera in the scene and run the game to see the output in the Console window.
11. Go to GitHub Desktop and commit your changes with message: "Completed through step 10"
12. Test your game and fix any issues.

Submit your work

13. Make a final test of your code and copy the output from the console window.
14. If you need to make any additional changes to your code, make sure you commit them.
15. By committing and pushing your updates to GitHub you have submitted your assignment on GitHub Classroom.
16. Return to CodeHS. Paste your output into the code window to complete the assignment