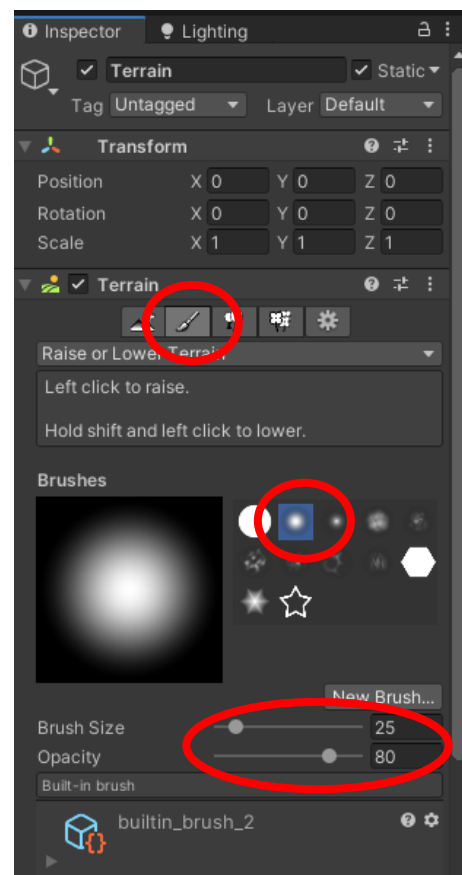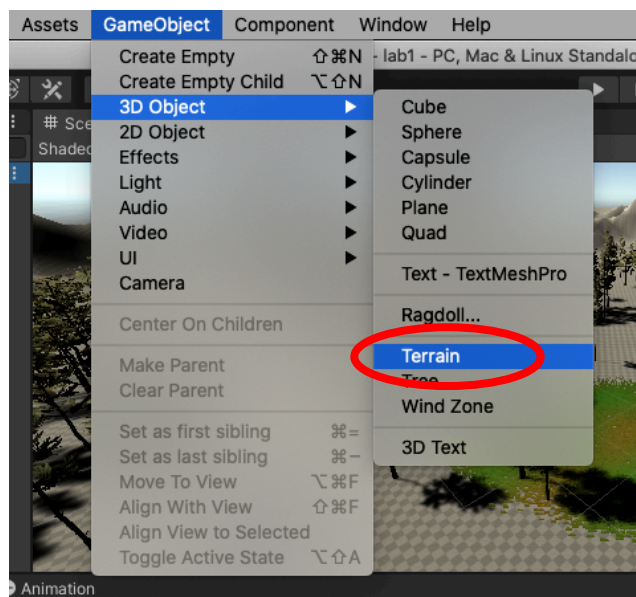**Unity**
Lab 0

Game Environment and Terrain

Procedure
1. Start a new 3D project
2. In Hierarchy, rename the SampleScene as **Game**

Terrain
1. In the Menubar, select GameObject > 3D Assets > Terrain
2. Select Terrain in Hierarchy, and in the Inspector, add terrain by selecting 'Paint Terrain' button in the Terrain component
   a. Adjust the brush size
   b. Adjust opacity
3. Paint onto terrain in the Scene window
4. Press the left mouse button and move around the scene to create hillsides
5. Press the left mouse button and hold to create mountains

Trees
1. Go to the Unity Asset Store, download and import the SpeedTree asset
2. Click on 'Paint Trees' button in Inspector under Terrain component
   a. To add a tree, click on 'Edit Trees' and select 'Add Tree'
   b. The Add Tree window will pop up
   c. In Project, select Free_SpeedTrees in the Assets folder, select any 'Tree.spm' asset (files with a right arrow)
   d. Drag asset to the Tree Prefab option (with the ⊙ symbol) of the Add Tree window
   e. In Inspector, select 'Apply and Regenerate Materials'
3. In Hierarchy, select Terrain
   a. Adjust the brush size
   b. Adjust tree density
4. Paint the tree onto terrain in the Scene window
5. In the 'Tree Height' setting, adjust the slider to get the minimum and maximum height of trees that will be randomly generated and painted
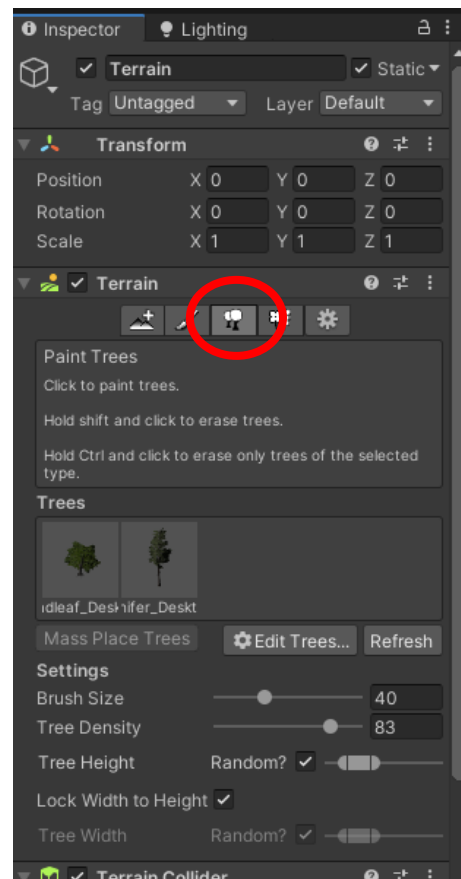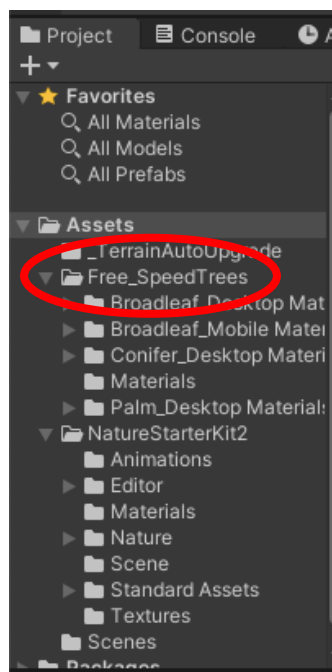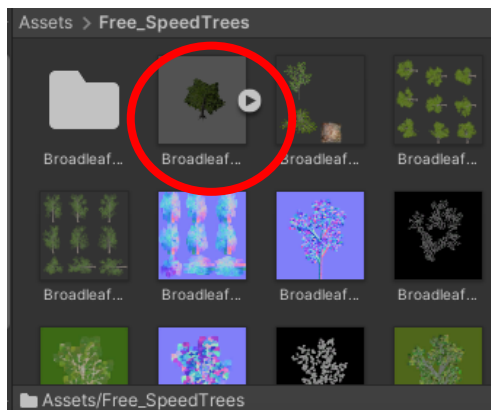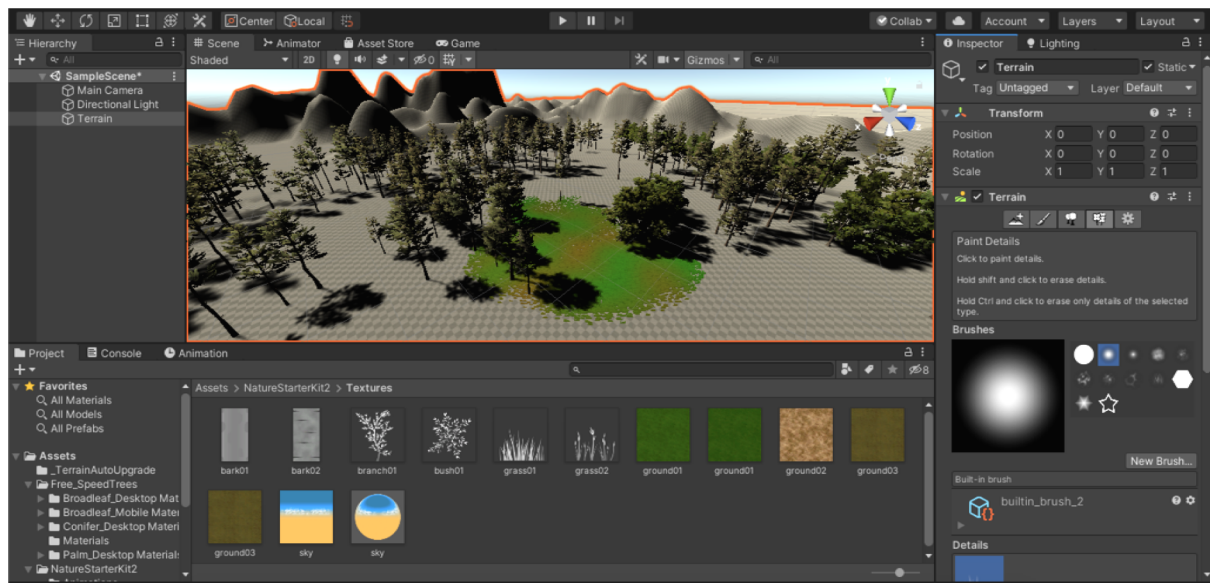
Grass
1. Go to the Unity Asset Store, download and import the NatureStarterKit2 asset
2. In Hierarchy, select Terrain
3. In Inspector, select 'Paint Details' button in the Terrain component
   a. Select 'Add Grass Texture' and the Add Grass Texture window will pop up
   b. Choose any Grass.tga asset in the Textures folder (from NatureStarterKit2 asset)
   c. Drag the Grass.tga asset to the option Detail Texture (with the ⊙ symbol)
   d. Click 'Add' button and the grass icon will appear in the Details section of the Terrain component
   e. Adjust the brush size and paint onto terrain in the Scene window
4. If the grass cannot be seen from a distance in the scene, go to 'Terrain Settings' button in the Terrain component
   a. In the 'Tree & Detail Objects' setting, use the 'Detail Distance' slider option to increase or decrease the level of details
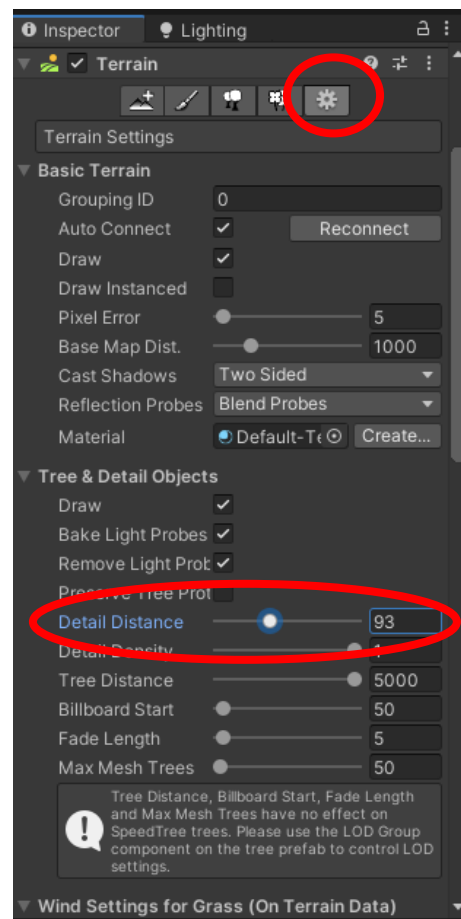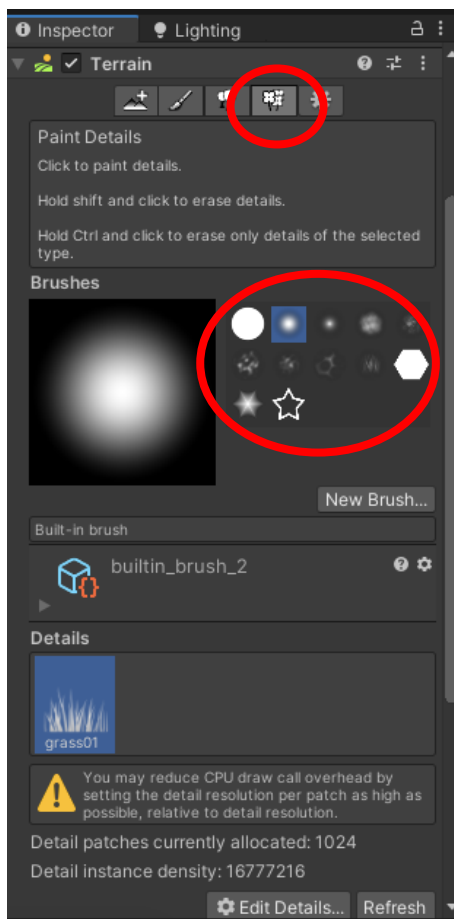
Full window scene

END OF LAB EXERCISE