# Autodesk FBX SDK Exercise 03, 04, 05

## Exercise 03: Create a scene that contains one camera and one light. Add custom properties. Output the connections in the scene. Export the scene to an ASCII FBX file.

## Exercise 04: Add a cube with materials to the existing scene. Export the scene to an ASCII FBX file.

## Exercise 05: Add a cube with materials to the existing scene. Export the scene to an ASCII FBX file.

The next three exercises will build a complete scene. In the skeleton code, look for the comments like this: // ... to know where to implement the required code.

NOTE: Remember the environment variables form Exercise 2 are necessary for the project settings to work.

Unit 3 Exercise

1. Open the “FBX-SDK-Exercise-03\Skeleton\fbx-exercise-03.vcxproj” project file in Visual Studio
2. Open the “fbx-exercise-03.cpp” source code file in the VS editor and scroll down to the “main” console application entry point function. Within this function, you will implement certain functionality for the export of an ASCII FBX file. The source code is commented to ask you for this functionality and is also listed here:
   1. Create a FbxManager instance and a scene. Get the root node.
   2. Create a directional Camera
   3. Create a Point Light
   4. Add some user properties to the light’s node, and also connect them to camera object (Hint: Use the ConnectSrcObject API for this.)
   5. Iterate the scene and output the connections
   6. Export the scene to ASCII FBX format
   7. Clean-up and end the program
   8. Open FBX file in ASCII text editor and review files contents

Unit 4 Exercise

* 1. Create a cube
  2. Create materials for each side of the cube
  3. OPTIONAL: Create a sphere
  4. OPTIONAL: add a texture to the sphere
  5. Export the scene to ASCII FBX format (nothing new to do here)
  6. Open FBX file in ASCII text editor and review files contents

Unit 5 Exercise

* 1. Animate the cube
  2. Export the scene to ASCII FBX format (nothing new to do here)
  3. Open FBX file in ASCII text editor and review files contents

NOTE: The solved versions are also included in the adjacent sub-directory to help you if you are stuck.