

# **UNIVERSITY OF PETROLEUM & ENERGY STUDIES**

#### SCHOOL OF COMPUTER SCIENCE

**Department of Cybernetics** 

# **GRAPHICS AND ANIMATIONS TOOLS**

LAB FILE

SESSION (2020-21)

Course: B.Tech with specialization in Open Source & Open Standards

Submitted to: Submitted by:

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## **Experiment-9**

#### **AIM-** Design of Mountain using Blender

Link: https://drive.google.com/drive/folders/1B-oxpjj9\_6ZdDpikOp-F6yhaV-87y1E9

- 1. Open up Blender and delete everything if you want.
- 2. We need to use a plugin that will generate mountains for us. So go to File -> User Preferences -> Add-ons.
- 3. Look for (or type in) the addon 'ANT Landscape'. Enable by checking the box on the right (near the scared-looking human figure).
- 4. Close the User Preferences window.
- 5. Now add the landscape by Shift+A -> Add -> Landscape. You should now have your own little mountain!
- 6. But wait! Don't do anything with the mountain yet! You can customize that mountain to look more like what you want. On the left, you will see a mini-panel called Landscapes (if you don't see it, press T to toggle the toolbar). Here, you will be presented with a bunch of options you can change.

### **Landscape settings**

There's a lot of settings here! The main settings are described below:

- **Subdivision:** This subdivides your mountain. The more subdvisions, the more detail you can throw at your mountain.
- Mesh size: Changes the size of your mountain.
- Type and Basis: Gives your mountain different distinctive looks based on textures.
- Random seed: Changing this gives a unique mountain while maintaining all the other settings. Good if you need a few of the same type (or breed) of mountains in one scene but want to make each of them look unique.
- **Noise:** The smaller the value, the more distortions and bumpy noise you'll have on your mountains.
- **Height:** The maximum height of the mountain.
- **Offset:** Offsets the height of the mountain overall.
- **Plateau:** The height at which the mountain should have a plateau (look flat). Good to create Grand Canyon type of scenes.

#### **Snapshots:**





