### **CLOUD COMPUTING ASSIGNMENT 1:**

# **Setting Up VirtualBox and Creating A Virtual Machine**

Information Technology (A3)

Team: Samudra Roy Swapnadeep Mishra

Roll: 002211001114 002211001115

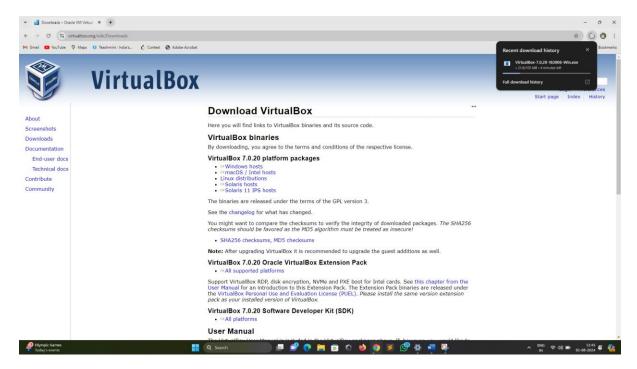
Name: SWAPNADEEP MISHRA Roll No: 002211001115

#### Step 1: Download and Install VirtualBox

To get started with cloud computing, the first step is to download and install VirtualBox. VirtualBox is a powerful, open-source virtualization tool that allows users to create and manage virtual machines on their computers. It supports a wide range of operating systems (Windows, macOS, Linux, etc.), making it an essential tool for running multiple environments simultaneously.



To install VirtualBox, visit the official website, download the Windows hosts package which is compatible with our operating system.



#### Follow these steps describe below to setup virtual box on PC:











Finally ,the virtual box setup is ready

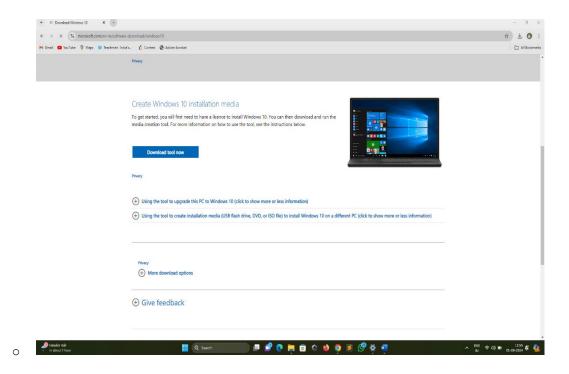


### **Step 2: Create a Windows 10 ISO File**

To install Windows 10 on VirtualBox, you need a Windows 10 ISO file. Follow these steps to create one:

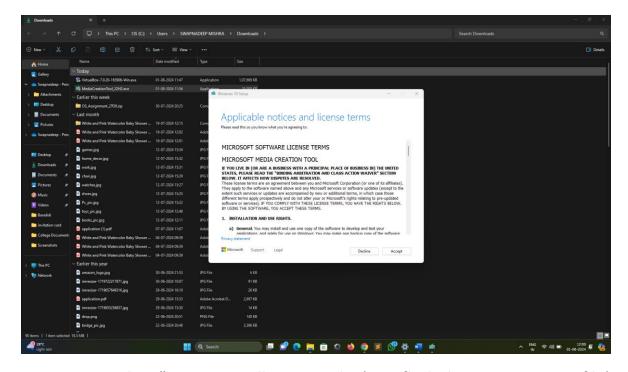
#### 1. Download the Windows 10 Media Creation Tool:

- Go to the official Microsoft website and navigate to the Windows
  10 download page.
- o Click "Download tool now" to download the Media Creation Tool.

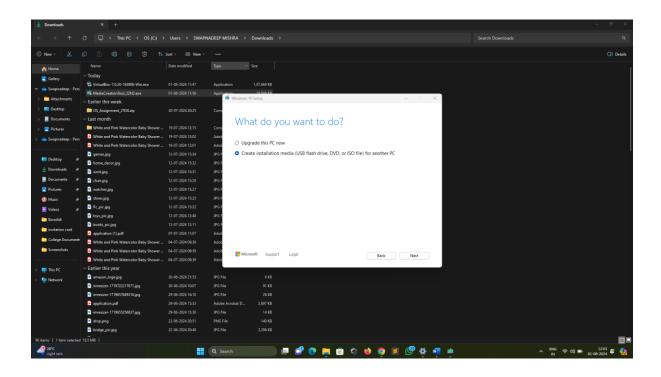


#### 2. Run the Media Creation Tool:

 Launch the MediaCreationTool.exe and grant any necessary administrative permissions.

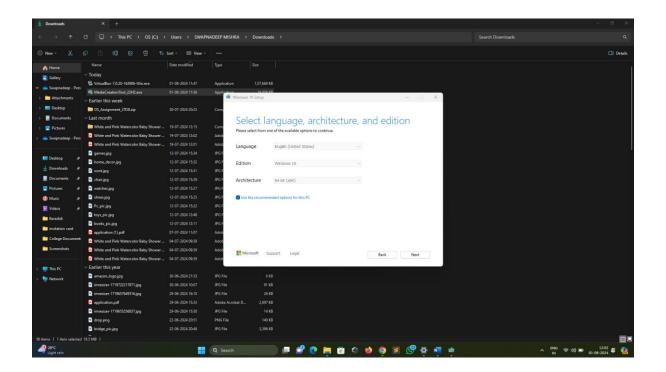


Select "Create installation media (USB flash drive, DVD, or ISO file) for another PC."

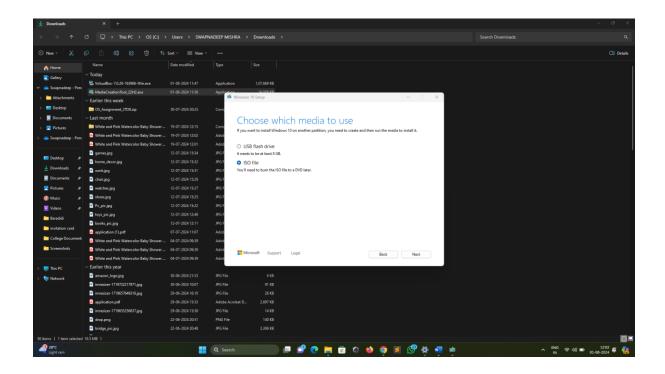


### 3. Create the ISO File:

 Choose the language, edition, and architecture (64-bit or 32-bit) that matches your requirements.



 Select "ISO file" as the media type and save it to your desired location. The tool will download and create the ISO file.





**Step 3: Set Up the Virtual Machine in VirtualBox** 

Now, use VirtualBox to create a new virtual machine for Windows 10:

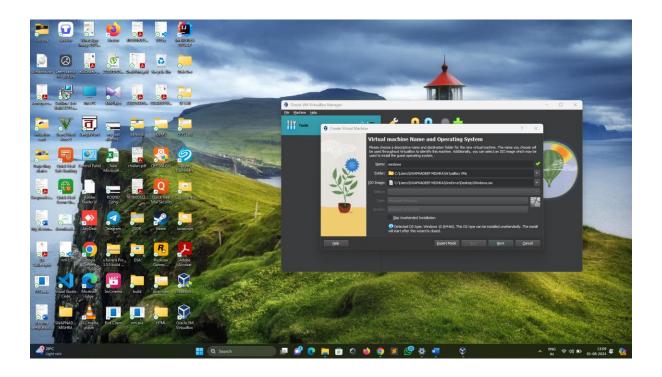
### 1. Open VirtualBox:

o Launch VirtualBox from your applications menu.



#### 2. Create a New Virtual Machine:

- o Click the "New" button in the VirtualBox Manager.
- o Enter a name for your virtual machine, like "Windows"
- Select "Microsoft Windows" as the Type and choose "Windows 10 (64-bit)" or "Windows 10 (32-bit)" as the Version based on your ISO file.
- Click "Next."

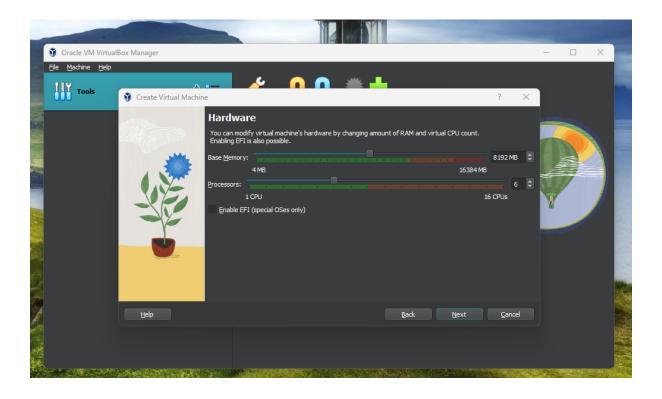


### **Step 4: Allocate Resources to the Virtual Machine**

Configure the virtual machine's hardware settings:

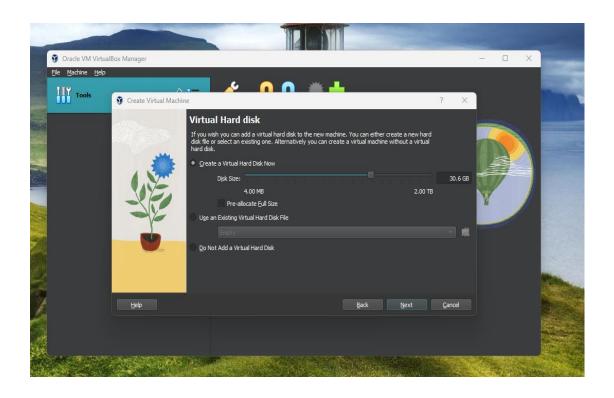
### 1. Memory Size:

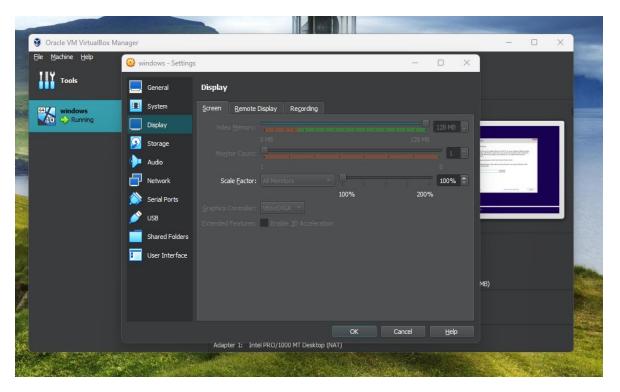
- Allocate RAM for the virtual machine. The minimum recommended is 2048 MB (2 GB), but allocating more will improve performance. We allocated 8192 MB memory size and 6 CPUs Processor.
- Click "Next."



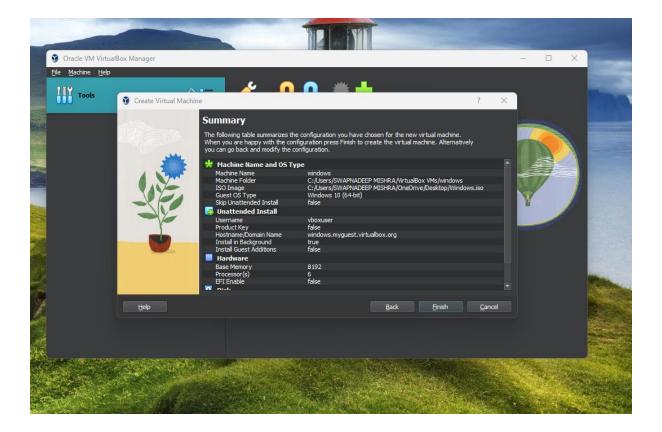
#### 2. Create a Virtual Hard Disk:

- Select "Create a virtual hard disk now" and follow the prompts to specify the hard disk size and type.
- Allocate sufficient storage space and click "Next."





Next check the summary and click "Finish" .

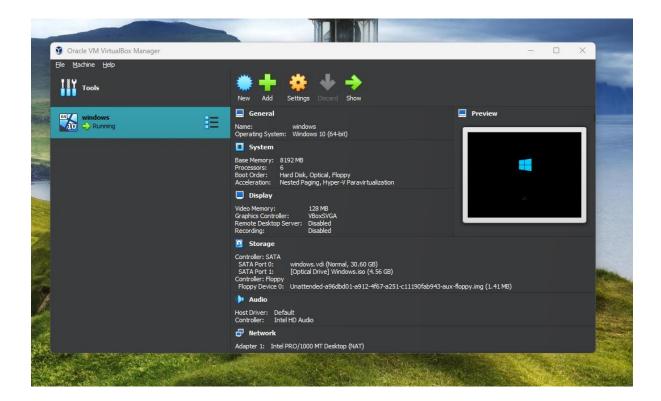


## **Step 5: Install Windows 10**

Start the virtual machine and proceed with the Windows 10 installation:

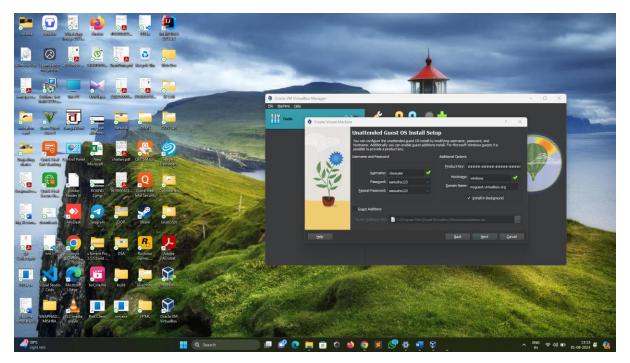
#### 1. Start the Virtual Machine:

- Select your Windows 10 virtual machine and click "Show."
- The virtual machine will boot from the ISO file, launching the Windows 10 setup.

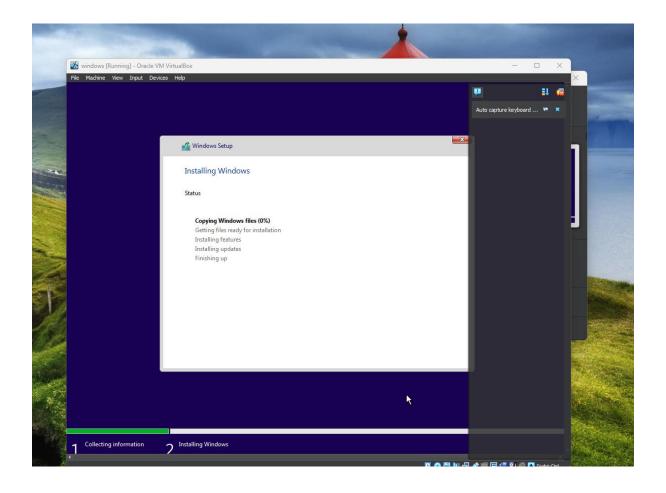


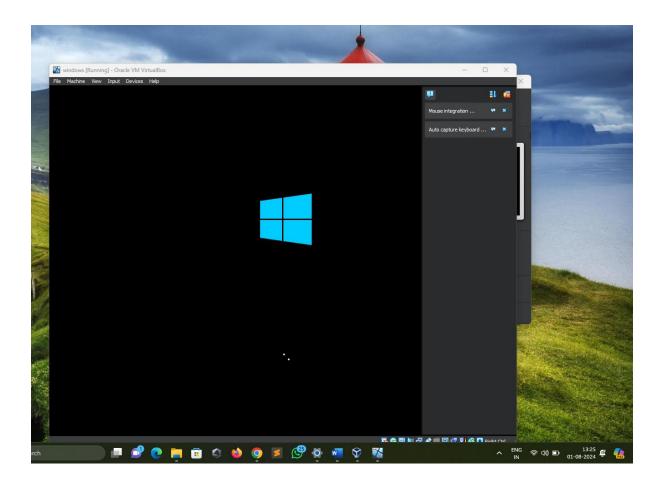
#### 2. Complete the Installation:

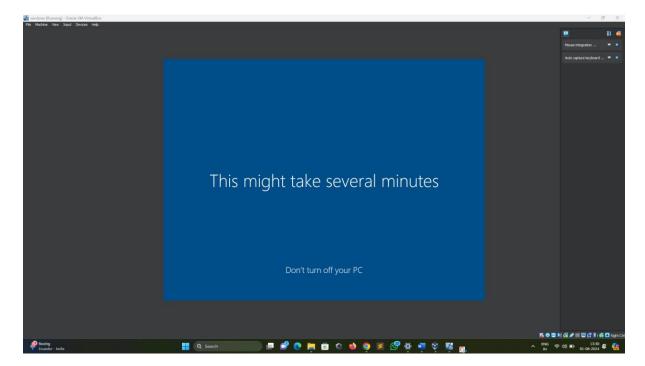
 Follow the on-screen instructions to install Windows 10, including selecting your language, entering your product key, and configuring user settings.



 Once the installation is complete, finalize the setup by adjusting system preferences and creating user accounts.







After successfully installing Windows 10, you can now use your virtual machine.

