Ex. No 5 Virtual Machine Implementation

Aim: To implement VirtualBox installation with Ubuntu OS on top of Windows OS.

Softwares Required

- VM VirtualBox (<u>https://www.virtualbox.org/wiki/Downloads</u>)
- Ubuntu OS (<u>https://ubuntu.com/download/desktop</u>)

Procedure:

1. Install VM VirtualBox in your system.



2. Continue in the Installation Wizard and Install software.

Oracle VM VirtualBox 6.1.36 Setup	×
Ready to Install	
The Setup Wizard is ready to begin the Custom installation.	
E	
X Click Instal to begin the instalation. If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.	
e	
a	
Version 6.1.36 < <u>Back</u> Instal	ancel

3. Finish the Installation and Start VirtualBox.



4. Create a New Virtual Machine in VirtuablBox.

😚 Oracle VM VirtualBox Manager				- o ×
File Machine Help				
Tools	Prefere			
	Wel	to VirtualBox!		
	The k and o	f application window contains global tools and lists all virtual machines and virtual ma w VMs using corresponding toolbar buttons. You can popup a tools of currently sele	chine groups on your computer. You can import, add cted element using corresponding element button.	
	You c	the F1 key to get instant help, or visk <u>www.vituabox.org</u> for more information an	d latest news.	

5. Enter Virtual Machine details in Create Virtual Machine section.

		?	×
- Create Virti	al Machine		
Name and	operating system		
Please choose a and select the t choose will be u	descriptive name and destination folder for the ype of operating system you intend to install or sed throughout VirtualBox to identify this machi	e new virtual n n it. The name ne.	nachine you
Name:	UbuntuVM		
Machine Folder:	C:\Users\Natarajaswan\VirtualBox VMs		
Type:	Linux		-
Version:	Ubuntu (64-bit)		1

6. Set Memory Size to 4096MB(4 GB).

r		?	×
← Create Virtual Machine			
Memory size			
Select the amount of memory (RAM) in megabytes to b machine.	e allocated to	the virtu	k
The recommended memory size is 1024 MB.			
4 MB	8192 MB	4096	MB
_			
	Next	Cano	el

7. Choose "Create Virtual Hard Disk" in Hard Disk section and Hard Disk File Type as VDI.

	? ×
7 ×	← Create Virtual Hard Disk
← Create Virtual Machine	Hard disk file type
Hard disk	Please choose the type of file that you would like to use for the new virtual hard disk. If you do not need to use it with other virtualization software you can leave this setting unchanged.
If you wish you can add a virtual hard disk to the new machine. You can either	VDI (VirtuaBox Disk Image)
the folder icon.	VHD (Virtual Hard Disk)
If you need a more complex storage set-up you can skip this step and make the changes to the machine settings once the machine is created.	VMDK (Virtual Machine Disk)
The recommended size of the hard disk is 10.00 GB.	
Do not add a virtual hard disk	
O Greate a virtual hard disk now	
Use an existing virtual hard disk file	
Empty *	
Create Cancel	Expert Mode Next Cancel

8. Choose "Dynamically Allocated" option in Storage on physical Hard Disk section.



9. Choose File Location and Size for Virtual Hard Disk and create the Virtual Machine

	Create Virtual Hard Disk File location and size Please type the name of the new virtual hard disk file into the box below or clck on the folder cont select a different folder to create the file in. C:\USersVHatarajasvan\VirtualBox VMs\Ubuntu/VM\Ubuntu/M.vd Select the size of the virtual hard disk in megatytes. The size is the Init on the amount of file data that a virtual machine will be able to store on the hard disk. 4.00 MB 2.00 TB Create Cancel	
🗿 Oracle VM VirtualBox Manager		- o ×
Eile Machine Help	New Settings Discard Start	_
	Ubuntu/VM Operating System: Ubuntu (64-bit) System: Ubuntu (64-bit) System: Base Memory: 4096 MB Boot Order: Floppy, Optical, Hard Disk Accelerator: VT-3/AMD-V, Nested Paging, KVM Paravirtualization Displag Used Memory: 16 MB Graphics Controller: VMSVGA Remote Desktop Server: Dasabled Recording: Dasabled	UbuntuVM
	Storage Controler: IDE DE Secondary Device 0: [Optical Drive] Empty Controler: SATA SATA Port 0: Ubuntu/M.vdi (Nermal, 10.00 GB) Audio Host Driver: Windows DirectSound Controler: ICH AG97	
	Network Adapter 1: Intel PRO/1000 MT Desktop (NAT) VSB USSB USSB	
	Device Filters: 0 (0 active)	
	None	NATARAJASIVAN Internet access VirtualBox Host-Only Network No Internet access

10. Start the Virtual Machine and select "Startup Disk" to load Ubuntu OS.



11. Add the Downloaded Ubuntu Installation ISO file from the Optical Disk Selector Menu

	🗾 UbuntuVM [Powered Off] - Oracle VM VirtualBox — 🗆 🗙
	File Machine View Input Devices Help
	You have the Auto capture keyboard option turned on. This will cause the Virtual
	Optical Disk Selector ? ×
	Medium
(
	Add Deate Refresh
	Name Virtual Size
	Search By Name
	Chases Laws Emply Cored
	Choise Leave Enipty Calce
	2 💿 👰 🛃 🖉 🛄 🔛 😭 💌 Right Ctrl 🔮
	I Ubuntu AA (Downered Off) Oracle VAA Victual Pay - D - Y
	She Markier, Mark Barley, Unit
	File Machine View Input Devices Help
	You have the Auto capture keyboard option turned on. This will cause the Virtual
	👩 Optical Disk Selector ? ×
	Medium
	Add Create Refresh
	Name Virtual Size
	✓ Not Attached
	ubuntu-22.04.1-desktop-amd64.iso 3.56 GB
	Search By Name 🔹
	Choose Leave Empty Cancel
	👂 🖉 📑 🖉 🗖 🖬 🚰 🕼 🖉 🖡 Right Corl 🖉
	reach durdouse dailing the remaining community.
12. Start Ubuntu OS.	
	These Hill Downed OID Develo HAMPing Days
	Dountury (Powered Off) - Oracle VM VirtualBox - D X
	Hie Machine View Input Devices Heip
	You have the Auto capture keyboard option turned on. This will cause the Virtual
	r ×
	Select start-up disk
	Please select a virtual optical disk file or a physical optical
a	onve concaring a losk to start your new Virtual machine from.
	The disk should be suitable for starting a computer from and should contain the operating system was with to install
	on the virtual machine if you want to that now. The disk
	you switch the virtual machine off, but you can also do this
	yourser in needed using the Devices menU.
	uturnu-22.04.1-desktop-amdb4.so (3.50 UB)
	Start Cancel
	👂 🖉 🖉 🖉 🔲 🔤 🚰 🗐 🖉 💀 Right Col 🖉

13. Choose "Try or Install Ubuntu" option from the startup menu



14. Install Ubuntu on the Virtual Machine



15. Ubuntu will be installed on the Virtual Machine



Result:

Thus implementation of Ubuntu OS installation on a Virtual Machine using VirtualBox is completed and verified.