Assignment No:2

Aim : Study diff os for Rasberry Pi understanding the process of installation on Rasberry-Pi

Theory

Introduction

- The Rasberry Pi is a wonderful but poweful little computer that fits the place of your hand Despite of its size it has enough power to run os home media center a VPN a lot more

- The Rasberry Pi has a 60 card slot for mass storag & will attempt to boot of a trat device from 60 card when the board is powered on by 5v micro USB supply

- No mallet low good & powerfull the H/w of Rasberry Pi is without OS if is just a piece of silicon fibergrass & a few other condition materials

Rasbian

Currently Rasbian is the most popular linux based os for the Rasberry Pi, Rasbian is an Open source Os based on Debian, which has been modified specially for Rasberry Pi

For a beginnner its a good place to start especially if all starting with programing are used to windows based system as it has some to the undo

Pidora

After waiting for a long Rasberry Pi uses are finally getting an optimised version at pidard

to replace the current Rasplicn as the occurred excitment among the Rasberry Pi community who are finally getting opportunity to enjoy podcern on their devices aidtes the preview attempt to introduce pedora Remix to features of pidoera 18

Arch linux : Arch linux is an external choice for reasons one of the gretest advantages of the Arch linux distributions it its simplicity in approach & attitude

asmc : OSMC (open source media center is a free & open source media player on linux founded in 2014 OSMC you play back media from your local N|W attached storage & the internet asmc is a leading media center in terms of features set & community & is based on Kodi project

RetropIE Retro Pie allows you to turn your Rasberry Pi into a retro gaming machine its platform developed on the based on Rasbarin emulters station Rebro pie enable you to play your fav ardo, home console classic Pc game with min setup

Risc OS :- RISC OS is British os originally designed by Aorn computer Id in cambridge England & was 1st released in 1987 It was specially designed to sum at ARM chiped. It is first compact & efficient RIs as is not a version at leniux no it is way related to window & interstingly developed by original ARM team

Kali linux

Kali linux is a Debian based security auditing linux distribution, it is specially designed for digitally formises & pentration testing it is mentioned & funded by altering security Kali linux provides many pre installed package with numerous penetration testing
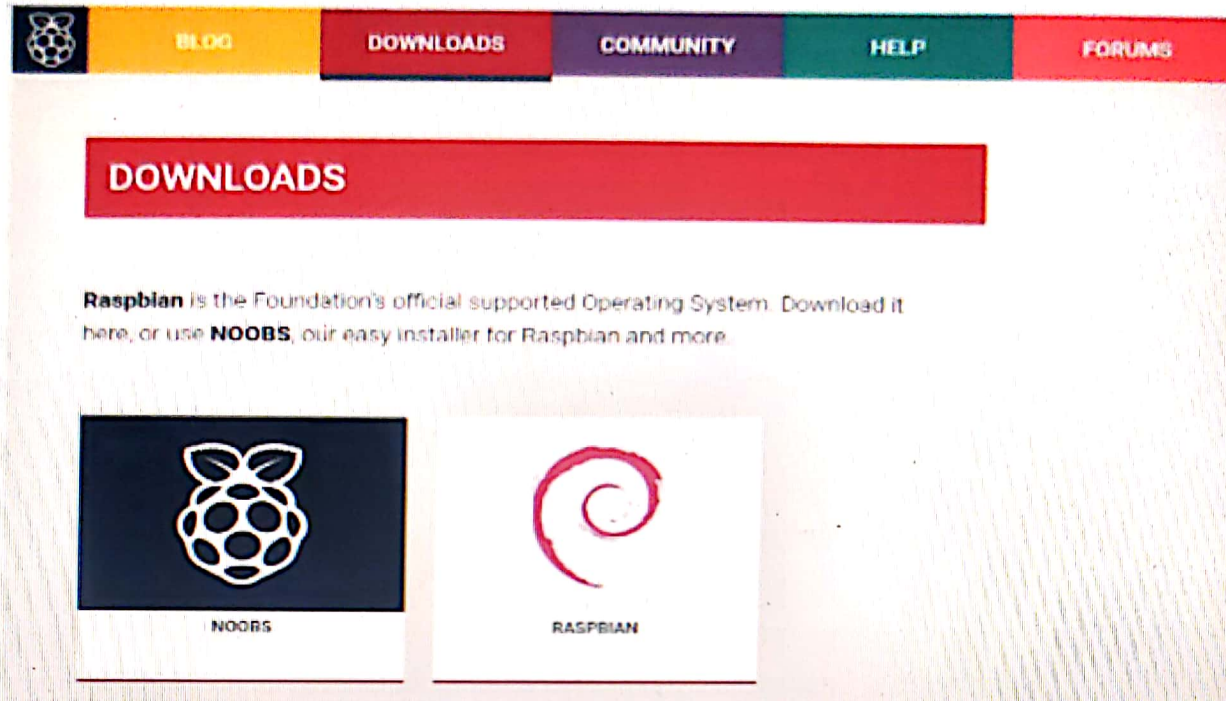
Conclusion

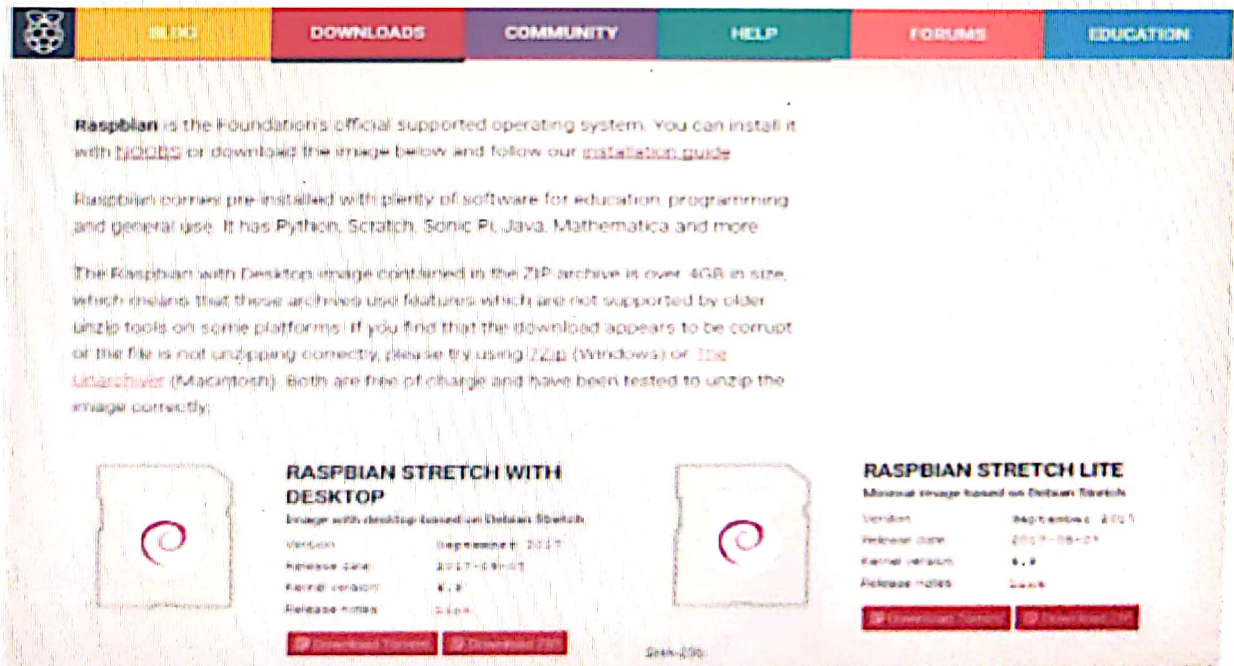Thus we have studied installation for various OS in Rasberry Pi

Aim/Objectives:

1. To understand the OS installation for Raspberry-Pi 3

Process of OS installation on Raspberry Pi Board

1. Open the website: www.raspberrypi.org
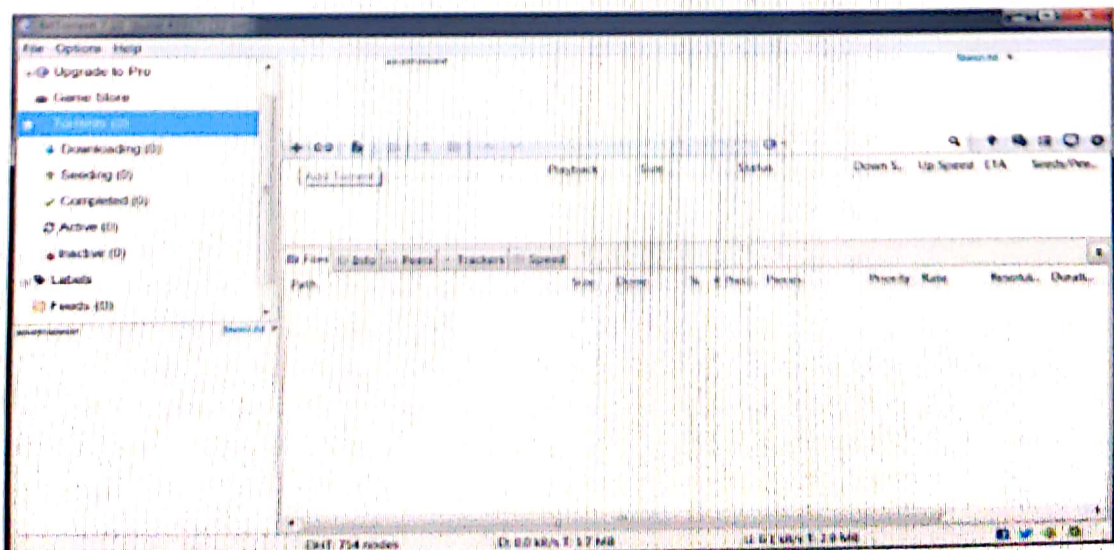2. Click on the "Downloads" tab
3.

4. Click on the "RASPBIAN" option.

5. We require "RASPBIAN STRETCH WITH DESKTOP", so under this heading, cl
"Download Torrent" option.

5. We require "RASPBIAN STRETCH WITH DESKTOP", so under this heading, click on "Download Torrent" option.

6. A "Torrent file" is downloaded.

7. But the actual OS is present in the ZIP file of this torrent.

8. So using this "Torrent file" and the "Bit Torrent" software, we download the ZIP file of the Raspbian OS.

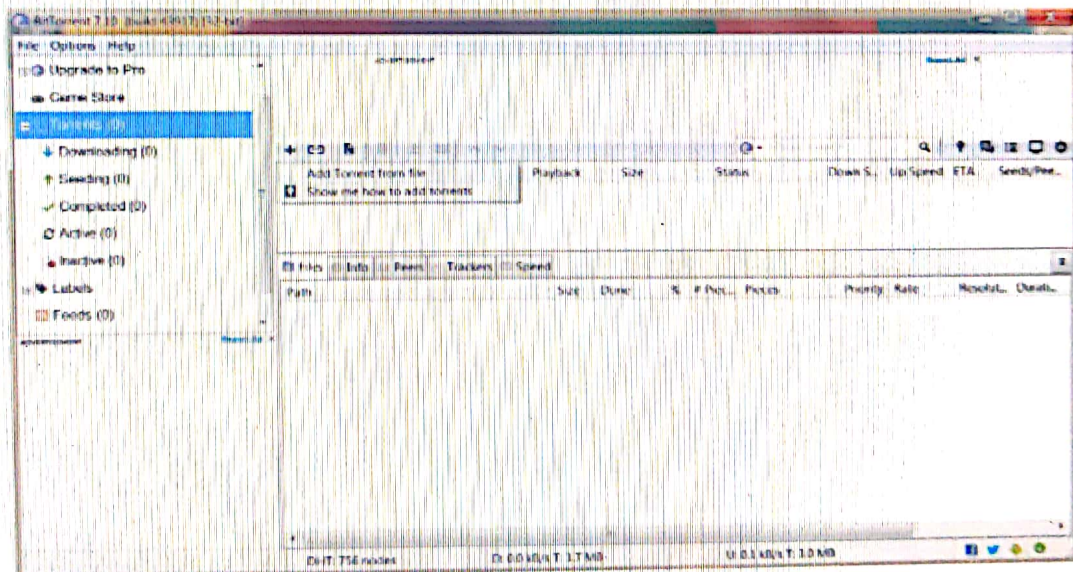9. So download the "Bit Torrent" Software and install it.
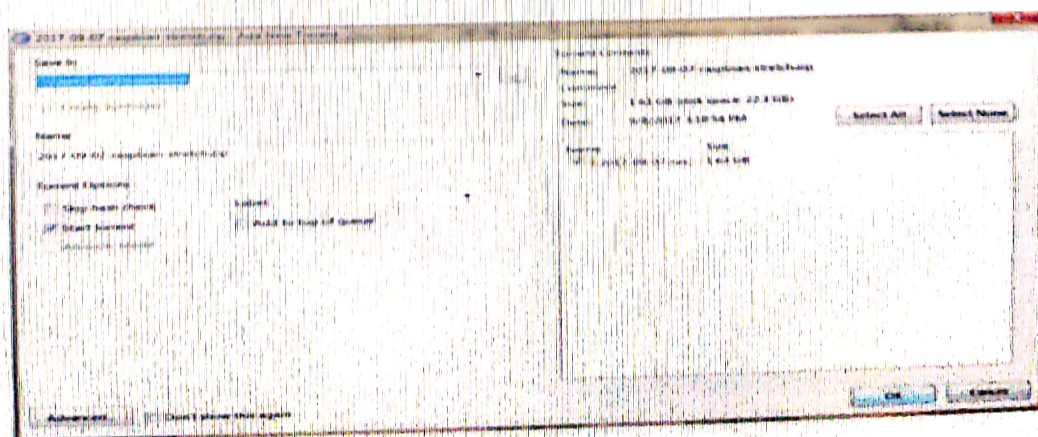
10. Now open the "Bit Torrent" software.

11. Click on the option "+" and under this click on "Add Torrent".

12. Here select the path of downloaded "Torrent file".

13. After selecting the torrent file, following window appears. Here click on OK

After completion of this process, we get the zip file named as "raspbian-strethc.zip".

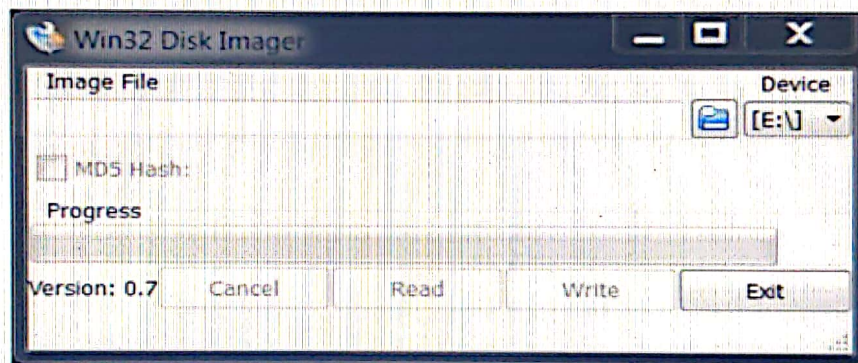☐ Now we have to unzip this file to get the actual disk image of the OS.

☐ AS the ZIP archive of the OS is more than 4GB, we require special software named "7Zip" toUnzip the file. So download the software and install it.

14. Using this 7Zip software, unzip of the file. After this we get the required disk image of theRaspbian OS (approx. 4GB)

15. Now we have to write this disk image on SD card.

16. To write the OS on SD card, we require the software "win32 disk imager". So download thissoftware and install it.
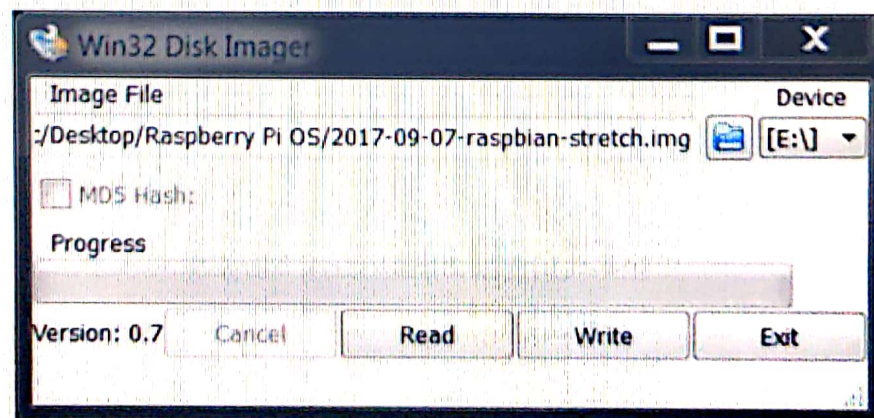
17. After completion of the installation, the following window appears.

18. Open the unzipped file in the "Image file" option byselecting the path from the Blue icon. The selected path is shown in the below image.
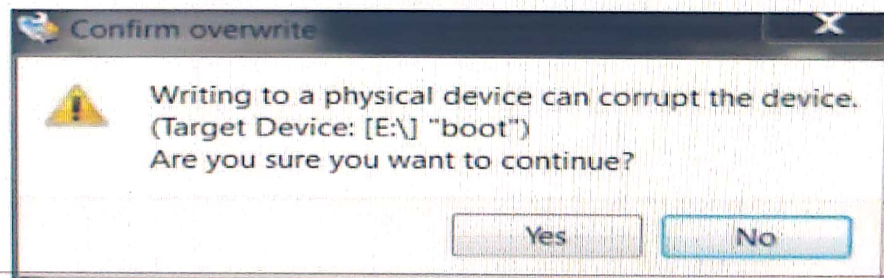
19. Now plug-in the SD card reader having SD card inside it, in the USB port of your PC.

20. Ensure that your SD card reader is having the same drive which is shown in the Device option (near the blue icon)

21. After ensuring that the "Image file path" and the "Device" are selected correctly, now click'Write'
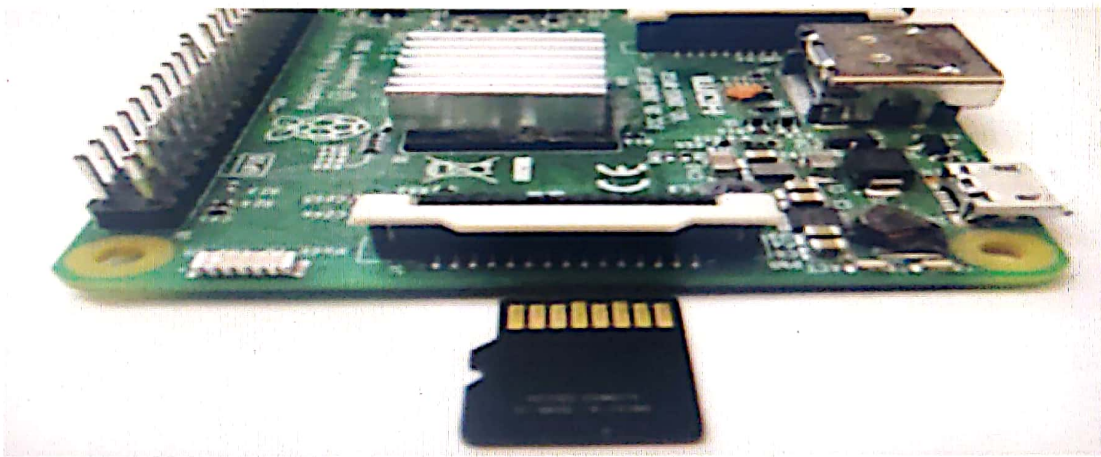
21. After ensuring that the "Image file path" and the "Device" are selected correctly, now click 'Write' button to write the image on the SD card.
22. After this the following window appears.

Confirm overwrite

Writing to a physical device can corrupt the device.
(Target Device: [E:\] "boot")
Are you sure you want to continue?

| Yes | No |

23. Here click 'Yes' and Confirm the overwrite
24. Image file will be written on SD card.
25. After the procedure is completed, it gives "Write Successful" message.
26. Congratulations! Your SD card is ready with your OS to work in the Raspberry-Pi-3 board.
27. Insert this SD card in Raspberry pi3.

28. Do the necessary connections and make the power ON. Your Raspberry-Pi starts and the Desktop of the OS is shown on the screen. Now Raspbery-Pi is ready to work on.