

TEA : 17

Assignment No : 2

Nikita Bhosale

Aim : Study of different operating system for Raspberry-pi understanding the process as installation on Raspberry-pi

Theory :

Introduction :

The Raspberry pi is a wonderful but power full little computer that fits the place of your hand. Despite of its size it has enough power to run operating system, home media center a VPN and a lot more.

The Raspberry pi has a 60 card slot for mass storage & will attempt to boot of that device from 60 card when the board is powered on by 5V micro USB supply.

① Raspbian :-
currently, Raspbian is the most popular linux based operating system for the Raspberry-pi, Raspbian is an open source operating system based on

Debian, which has been modified specially for Raspberry-pi

for a beginner it's a good place to start and specially if you are starting with programming & are used to windows based system as it bears some resemblance to the windows

② Pidora :-

After waiting for a long, Raspberry pi users are finally getting an optimised version of pidora to replace the current raspbian as the new occurred excitement among the Raspberry pi

③ Arch linux :-

Arch linux is an excellent choice for seasoned one of the greatest adv of the Arch linux distribution is its simplicity in approach & attitude

④ Osmc :-

Open source media Center is a free & open source media player based on linux founded in 2014 Osmc lets you play back media from your local n/w, attached storage & the internet Osmc is leading media center in term of feature set & community & is based on Kodi project

⑤ RetroPie :-

Retro pie allows you to turn your Raspberry Pi into a retro gaming machine its platform developed on the base on Raspbian emulation station, Retro pie enable you to play your fav old, home-console PC games.

⑥ RISC OS :-
RISC OS is British OS originally designed by Acorn computer Ltd in Cambridge England & was first released in 1987. It was specifically designed to run on ARM chip. It is first compact & efficient RISC OS is not a version of Linux, no is it any way related to Windows.

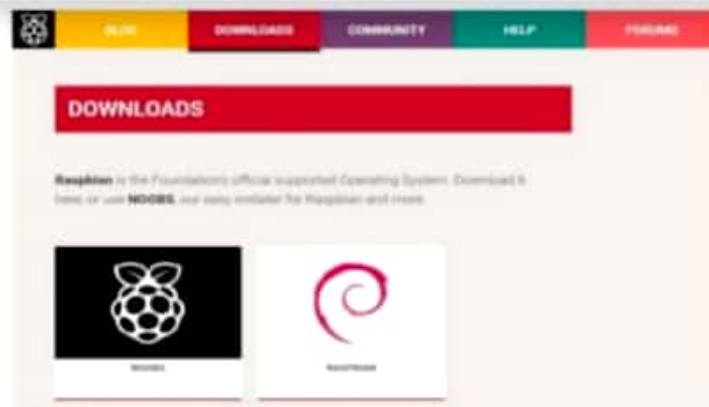
⑦ Kali Linux :-
Kali Linux is a Debian based security auditing Linux distribution. It is specially designed for digital forensics & penetration testing. It is mentioned & founded by Offensive Security. Kali Linux provides many pre-installed packages with numerous penetration testing tools.

- ★ Installation of OS for Raspberry Pi
1. Open website www.raspberrypi.org
 2. Click on Download tab.
 3. Click on RASPIAN option.
 4. We require - Raspbian stretch with Desktop.
 5. Click on download torrent option.
 6. A torrent file is downloaded.
 7. But actual OS is present in zip file of these.
 8. Now open the BitTorrent software.

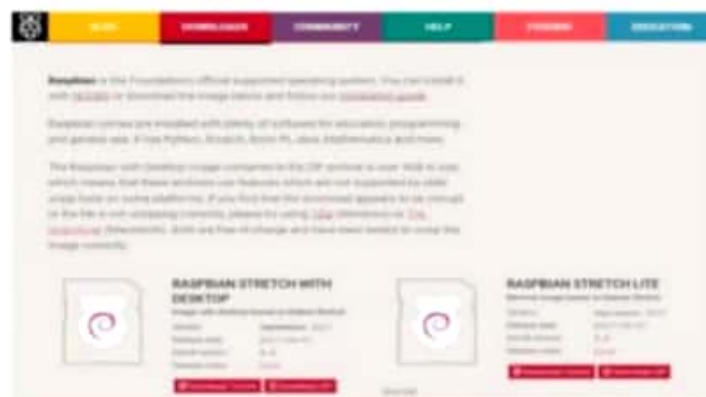
Conclusion:

Thus we have studied installation for various OS in Raspberry Pi.

3.



4. Click on the "RASPBIAN" option.

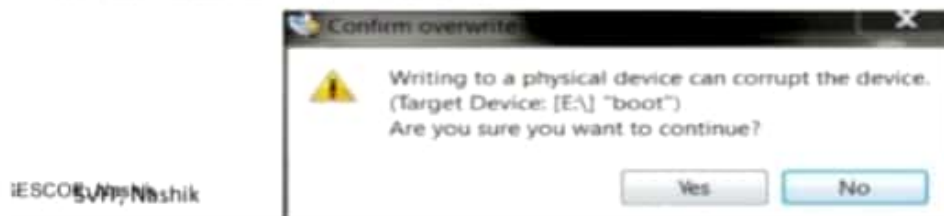




18. Open the unzipped file in the "Image file" option by selecting the path from the Blue icon. The selected path is shown in the below image.
19. Now plug-in the SD card reader having SD card inside it, in the USB port of your PC.
20. Ensure that your SD card reader is having the same drive which is 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' button to write the image on the SD card.
22. After this the following window appears.



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.

