Raspbian Operating System

Tushar B. Kute,
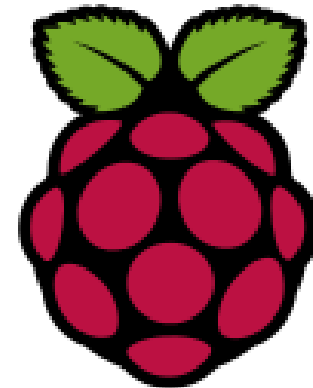http://tusharkute.com

Raspbian

- Raspbian is a Debian-based computer operating system for Raspberry Pi. Since 2015 till now it is officially provided by the Raspberry Pi Foundation as the primary operating system for the family of Raspberry Pi single-board computers.

- Raspbian was created by Mike Thompson and Peter Green as an independent project.

- The initial build was completed in June 2012.

- The operating system is still under active development. Raspbian is highly optimized for the Raspberry Pi line's low-performance ARM CPUs.

Raspbian

- Raspbian uses PIXEL, Pi Improved Xwindows Environment, Lightweight as its main desktop environment as of the latest update.

- It is composed of a modified LXDE desktop environment and the Openbox stacking window manager with a new theme and few other changes.

- The distribution is shipped with a copy of computer algebra program Mathematica and a version of Minecraft called Minecraft Pi as well as a lightweight version of Chromium as of the latest version.

Basic features

- Developer   Raspberry Pi Foundation
- OS family   Unix-like
- Source model   Open source
- Latest release   Raspbian Jessie with PIXEL / 16.02.2017
- Marketing target Raspberry Pi
- Update method   APT
- Package manager   dpkg
- Platforms   ARM
- Kernel type   Monolithic
- Userland   GNU
- Default user interface PIXEL, LXDE
- License Free and open-source software licenses (mainly GPL)
- Official website   https://www.raspberrypi.org/downloads/raspbian/

Downloads

How to write image?

- ## Ubuntu
  - Startup disk creator
    - Default Application Available
- ## Windows
  - Win 32 Disk Imager
    - Download from sourceforge.net

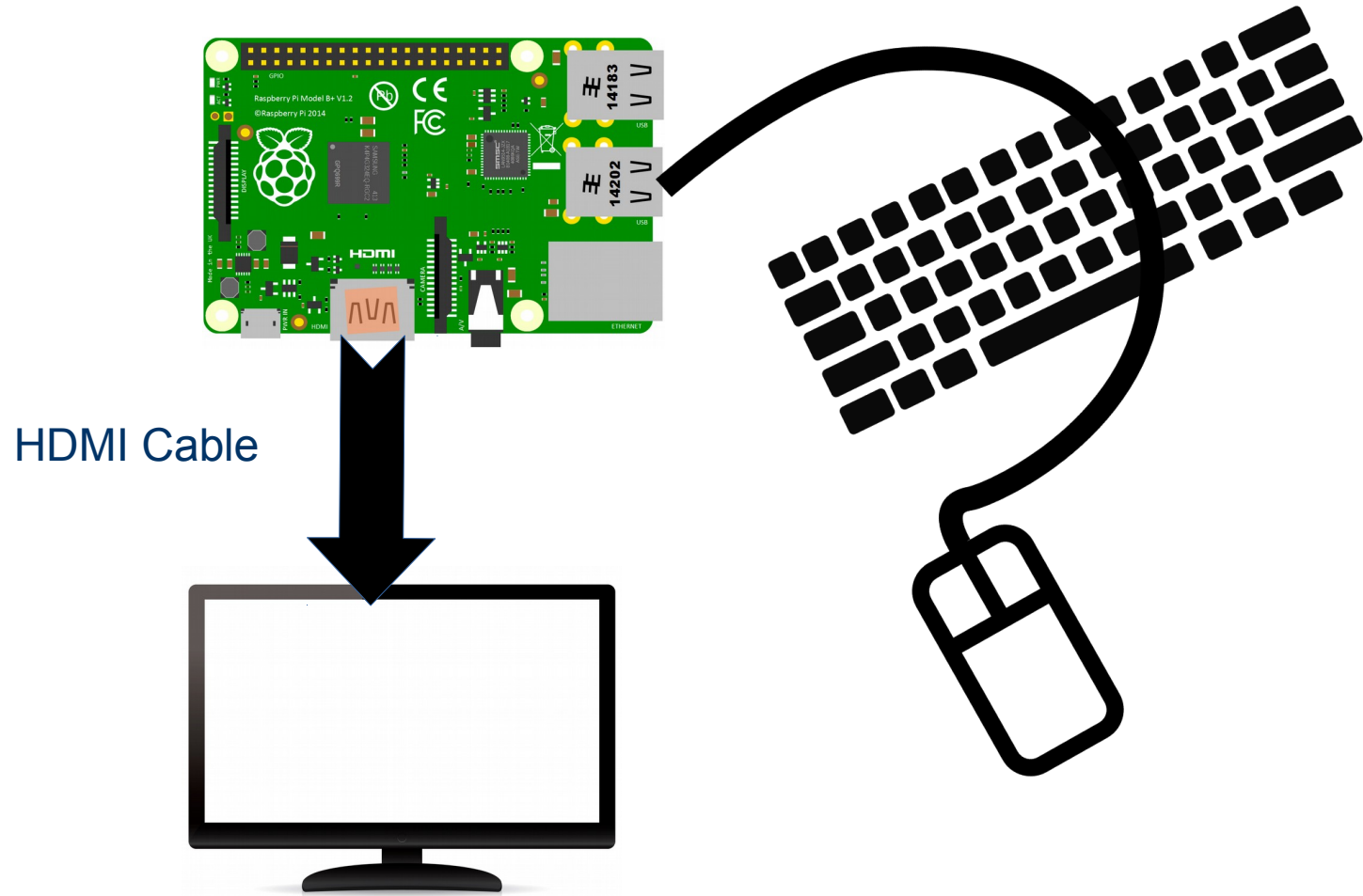tusharkute
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Startup Disk Creator
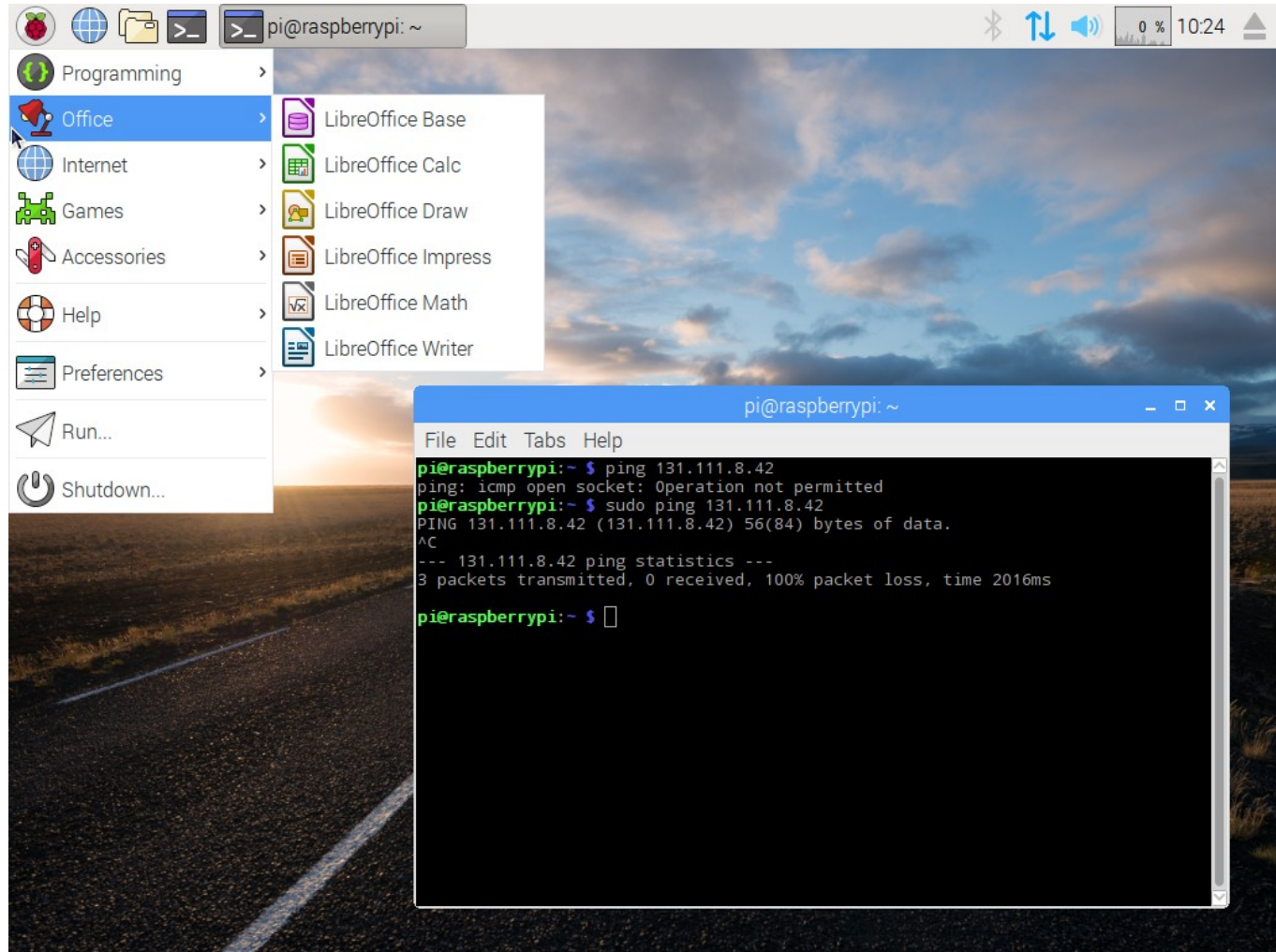
Win 32 Disk Imager

Finalization

- Complete the disk image writing process.
- Now insert the SD card in Raspberry Pi.
- Plug-in the power supply to the kit.
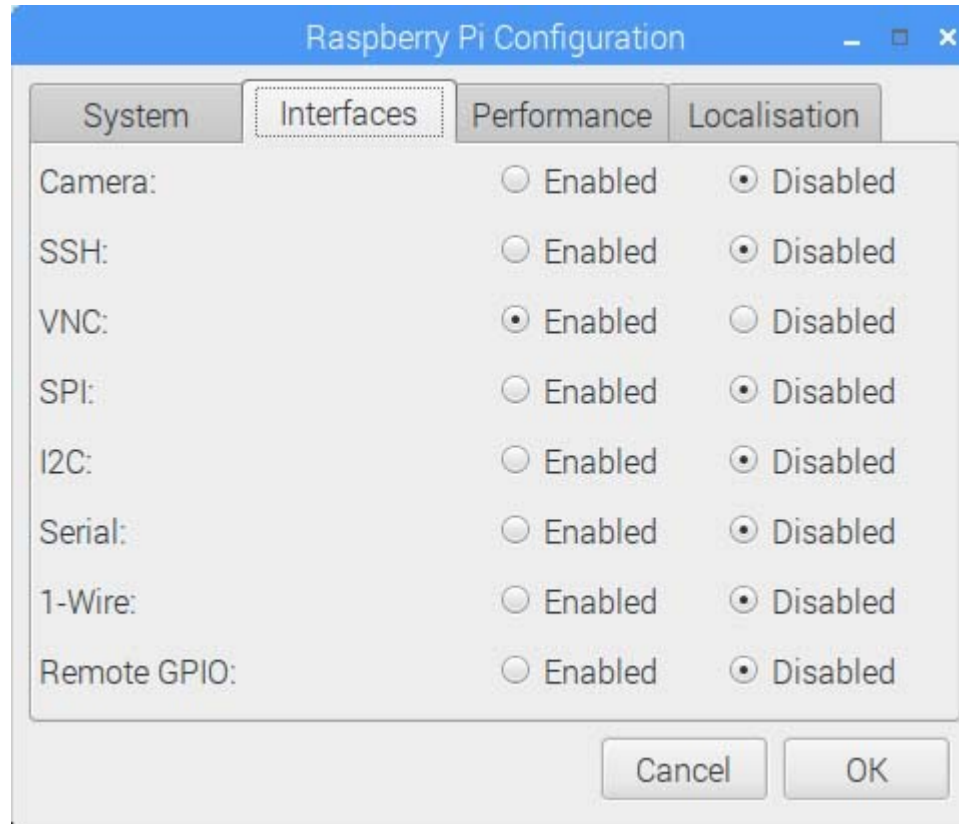- Lets see the OS….

Starting Raspberry Pi

HDMI Cable

Raspbian Desktop

Raspbian Interfaces

Programming Languages

- Python [Recommended for coding]
- C
- C++
- Java
- Scratch

Software Management on Pi

- sudo apt-get update
- sudo apt-get upgrade
- sudo apt-get install <package>
- sudo apt-get download <package>
- sudo apt-get remove <package>
- sudo apt-get purge <package>
- sudo apt-get dist-upgrade

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Thank you

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@mitu_group

Web Resources
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http://kyamputar.blogspot.in

tushar@tusharkute.com