

SIT210: Embedded Systems Development

Task 4.1P RPi - Installing OS

Raspberry Pi (RPi) is one of the most widely used single board computers in the world today. This task will be the introduction to RPi and how to install Raspbian operating system on your devices. It will play a key role in future tasks involving RPi and your projects.

Hardware Required

Raspberry Pi
Blank microsd card

Software Required

SD formatter software
Downloaded Noob: <https://www.raspberrypi.org/downloads/>

Pre-requisites: You must do the following before this task

- 1) A complete installation instruction for New Out Of Box Software (NOOBS) on RPi is available through raspberry pi website. Please read about the installation process here: <https://www.raspberrypi.org/documentation/installation/noobs.md>

Task Objective

In this task, you will learn how to install a brand new operating system for Raspberry Pi using a blank SD card.

Steps:

- 1) Format the SD card as FAT
- 2) Extract the contents of the NOOBS zip file directly to the SD card
- 3) Insert the card into the Raspberry Pi and boot it up. Make sure you plug a monitor, keyboard and mouse into the RPi first.
- 4) Power on the Raspberry Pi and verify that the operating system has been installed properly.
- 5) Open a command shell in Noobs, create a directory in the home folder with your student's username.
- 6) Create a text file using Nano text editor, name it with your student ID.
- 7) Use the "ls" command to list the file in the directory.

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Task Submission Details

Q1: Provide the screenshot capturing the output of the ls command in step 7) above.

Remember, anytime you submit a task to OnTrack, it is a good practice to check the status of any existing tasks, and the future tasks you are expected to complete. If you have got feedback on previous tasks, you may need to fix and resubmit some of your work. You want to check out why, so that you can learn from this and make it faster and easier to accomplish later work to the required standard.