INTERNET OF THINGS LAB

# LAB MANUAL

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT

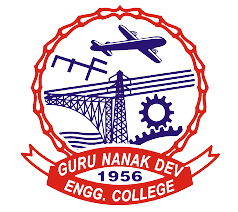
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# Information Technology Department GURU NANAK DEV ENGINEERING COLLEGE

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**Practical 1: Familiarization with Arduino/ Raspberry Pi and perform necessary software installation**

Raspberry Pi and Arduino are two very popular boards among electronics DIY builders, hobbyists and even professionals. Raspberry Pi and Arduino are quite different boards. While Arduino is aimed at quick programming and circuit prototyping, Raspberry Pi acts as a learning tool for Computer Programming (but you can find Raspberry Pi is several DIY Projects as well). Each board has its own advantages and disadvantages.

Let us take a closer look at these two boards, understand the differences between Raspberry and Arduino and also build a comparison of Raspberry Pi vs Arduino in a tabular format. If you want to decide between the two, then it depends on the requirement of your project but we hope this article will helpful in understanding the differences between these two boards and helps you in selecting the right board for your next project.

**Arduino:**

Let us start with Arduino. Arduino was developed by Massimo Banzi Et Al. in Ivrea, Italy. Arduino is a simple electronics prototyping tool with open-source hardware and software. Arduino is essentially a Microcontroller development board using which you can Blink LEDs, accept inputs from Buttons, read data from Sensors, control Motors and many other “Microcontroller” related tasks.

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