SVKM'S NMIMS

Mukesh Patel School of Technology Management & Engineering

Department of Mechatronics Engineering

Signal Processing Lab

Subject- Virtual Instrumentation

EXPERIMENT NO. 10

Aim: To control LED using NI DAQ card in LabVIEW

Software Used : PC with software (NI LabVIEW)

Theory:

NI DAQ Assistant is a software tool provided by National Instruments (NI) that simplifies the configuration and acquisition of data from National Instruments' data acquisition (DAQ) hardware within LabVIEW.

With the NI DAQ Assistant, you can easily configure your DAQ hardware and acquire data without having to write any low-level code. The tool allows you to select from a variety of measurement types, such as voltage, current, temperature, strain, and sound, and it provides you with an intuitive user interface to set up your data acquisition parameters, such as sampling rate, trigger mode, and input range.

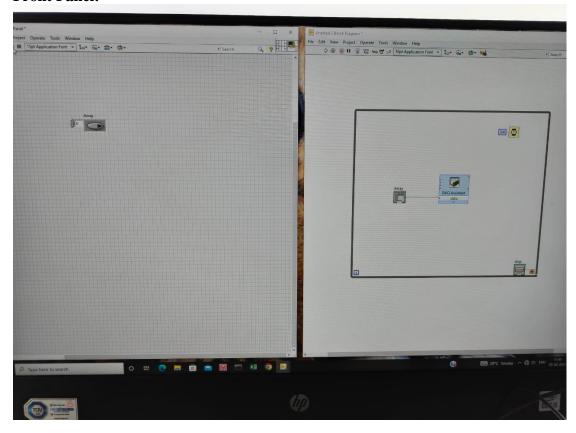
The NI DAQ Assistant automatically generates the LabVIEW code needed to acquire data from your DAQ hardware based on your configuration settings, and it also provides you with built-in visualization tools, such as waveform graphs and charts, to display the acquired data.

One of the key benefits of using the NI DAQ Assistant is that it saves you time and effort compared to writing custom code for communicating with your DAQ hardware. The tool provides an easy-to-use interface that abstracts away the low-level details of the DAQ hardware, allowing you to focus on your application-specific requirements.

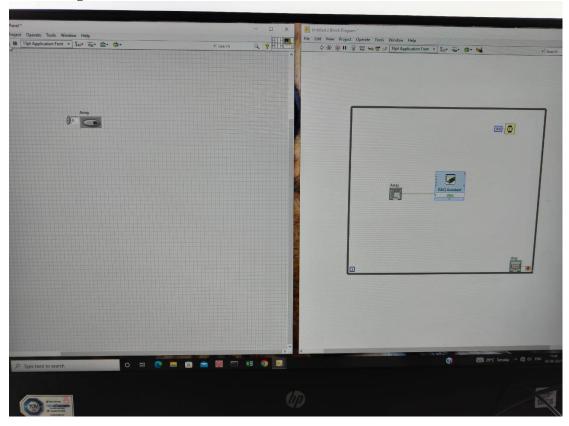
Overall, the NI DAQ Assistant is a powerful tool that simplifies the configuration and acquisition of data from National Instruments' DAQ hardware within LabVIEW, making it easier for you to develop and deploy data acquisition systems.

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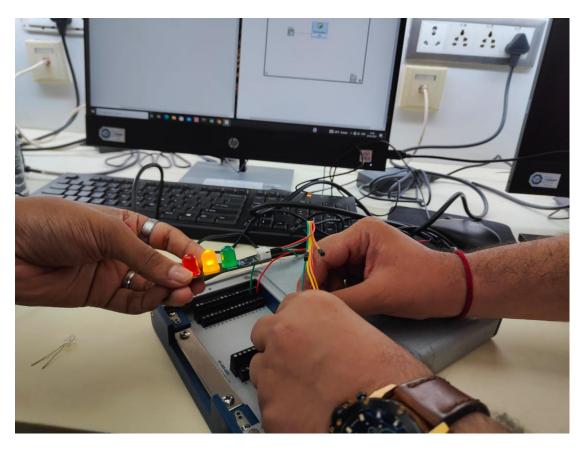
Front Panel:



Block Diagram:



Output:



Conclusion: The experiment was successfully performed in LabView.