

AN INNOVATIVE TECHNIQUE FOR DESIGNING PLC LADDER DIAGRAMS

Sanyam Jain

Department of Electronics and Communication Engineering
Meerut Institute of Engineering and Technology, Meerut, India

Dr. Subodh Kumar Tripathi

Department of Electronics and Communication Engineering
Meerut Institute of Engineering and Technology, Meerut, India

Mrs. Abhilasha Jain

Department of Electronics and Communication Engineering
Meerut Institute of Engineering and Technology, Meerut, India

The globe's biggest industries frequently utilize Programmable Logic Controls (PLCs), which are amongst the easiest control systems to program. A great number of sensors for usage as inputs and controllers for outputs is typically needed when using PLCs in manufacturing environments. They require different voltage supplies for those inputs and outputs. A digital or analog voltage might be present. Because of the core PLC's limited input and output capacity, those inputs and outputs would require an additional I/O module. The programming language ladder logic may be used to program a PLC. Logic processes are defined using symbolic notation in this graphical PLC programming language. The term "Ladder Logic" originated in from the way logic rungs are arranged to resemble a ladder. While a PLC analog input may be expanded, ladder logic is utilized primarily for bit logic tasks.