ABSTRACT

Home automation is one of the most researched topics in the present technological scenario. It is basically an application of Internet of Things or IoT. Internet of things is an interconnection of all the appliances and devices that we use in our everyday life; it may be coffee vending machines, smart phones, medical monitors to huge weather stations. In the approach of internet of things, all devices work in a synchronized manner, i.e. they are interdependent.

This system consists of a main processing unit (Raspberry Pi), microcontroller to interface the different modules, and the independent modules. In our project, the area which we focus on is home automation that works based on real time data. It does the following functions:

- *Adaptive internal lighting and automatic external lighting system*

- *Automatic water pumping system*

- *Password enabled door lock using keypad*

- *Interactive Music player*

- *Logging of all the control events*