



Fig 9: All appliances OFF

VII. RESULT AND DISCUSSION

In this project, pin 4,5,6 and 7 are the input pins of the arduino UNO. Pin 8,9,10,11 are the output of arduino connected to different appliances (shown by led here).On basis of program coded into arduino the led glows and goes off depending on the pressing of button on keypad. Assume appliance 1 be fan,appliance 2 be light, appliance 3 be TV. All appliances off from button 1. All appliances on from button 2. fan off from button 3. fan on from button 4. light off from button 5. light on from button 6. The sensor deactivates itself when the door is open and raises an alarm through the buzzer.

VIII. CONCLUSION

In this paper we present a prototype of home automation using DTMF and Arduino along with a door-lock system. This proposed system has a vast scope and limitless applications. When implemented its full potential, it can help minimize energy consumption. This system can be modularized which will help us achieve complex functionalities..It can extend a security feature which can use Computer Vision to detect hand motions, which in emergency may be used to turn on an alarm. Also the system can be made to take necessary decisions based on the conditions. Also, with the use of artificial intelligence we can make the system learn the changes that needs to be adapted in a particular situation. Thus, making the system completely reliable by using a hi-tech technology to make our home safe with least efforts.

REFERENCES

- [1] Alheraish, "Design and Implementation of Home Automation System", 2004, IEEE Transactions on Consumer Electronics ,Vol. 50(4) , pp. 1087-1092.
- [2] Baraka, K.; Ghobril, M.; Malek, S.; Kanj, R.; Kayssi, A., "Low Cost Arduino/Android Based Energy Efficient Home Automation System with Smart Task Scheduling," Tavel, P. 2007 Modeling and Simulation Design. AK Peters Ltd.
- [3] Elkamchouchi, H.; ElShafee, A., "Design and prototype implementation of SMS based home automation system," Electronics Design, Systems and Applications.
- [4] K. Vidyasagar, G. Balaji and K. Narendra Reddy"Android Phone Enabled Home automation", 2015, Journal of Academia and Industrial Research (JAIR), Vol.4(2),pp 65-68
- [5] H. Brooke Stauffer "Smart Enabling System for Home automation", 1991, IEEE Transactions on Consumer Electronics, Vol. 37(2) , pp. 29-35.
- [6] Harish Iyer , Chetan Wagaj , Niketan Newale, Ganesh Mhatre "Arduino based home Automation System: A survey", 2015, International Journal of Computer Applications (0975 – 8887), Vol.115(8), pp 14-16.
- [7] Viraj Mali, Ankit Gorasia, Meghana Patil, Prof.P.S Wawage "Home Automation and security using Micro controller", 2016, International Journal of Research in Advent Technology, Special Issue National Conference, pp-214-217.
- [8] N.Sriskanthan and Tan Karand "Bluetooth Based Home Automation System", 2002, Journal of Microprocessors and Microsystems, Vol.26, pp 281-289.