**Practical - 10**

**Aim:**

Simulate and upload Blink app on MicaZ

**Components:** MicaZ & MIB520 programmer board

**Procedure:**

* On terminal go to the folder where the BlinkOneLED.c program is stored

#cd contiki/examples/hello-world/BlinkOneLED

* Now Compile this blinking program application

#make TARGET=micaz BlinkOneLED #make TARGET=micaz savetarget

* If we try to upload code on MicaZ board with below command

#make BlinkOneLED.upload

We might get error of “Direct Parallel Access not defined” while using above command because we have to give specific permission to run this command. Solution is Download the lastet version of uisp from here (<http://kasun.ch.googlepages.com/uisp.tar.gz>). Now, Compile and install that using terminal command.

# tar -xvzf uisp.tar.gz

    # cd uisp

    # ./bootstrap

    # ./configure

    # make

    # sudo make install

* For compilation give permission to USB port.

# sudo  chmod  777  /dev/ttyUSB\*

* Finally, this command to upload Blinking code in to MicaZ mote

# make BlinkOneLED.upload  PORT=/dev/ttyUSB0

**Code: (For Blinking One Green LED)**

PROCESS(blinkoneled, "blink green led");// definition of process

AUTOSTART\_PROCESSES(&blinkoneled);// load the process at boot

PROCESS\_THREAD(blinkoneled, ev, data)// content of the process

PROCESS\_BEGIN();//defines the beginning of the process

SENSORS\_ACTIVATE(button\_sensor);

leds\_on(LEDS\_GREEN);//Starts the green led

leds\_toggle(LEDS\_GREEN);//blink the green led

exit:

leds\_off(LEDS\_GREEN);// stops the blinking of green led

PROCESS\_END();//ends the process thread