**Code for the interfacing of Soil moisture sensor with beagle bone black**

#include<stdio.h>

#include<stdlib.h>

#include<time.h>

#include<unistd.h>

#include<string.h>

void main()

{

FILE \*fp;

char buf[3];

char zero[3]="0";

int l;

//system("sudo su");

system("echo \"44\" >/sys/class/gpio/export 2>/dev/null");

system("echo \"out\" >/sys/class/gpio/gpio44/direction");

system("echo \"26\" >/sys/class/gpio/export 2>/dev/null");

system("echo \"in\" >/sys/class/gpio/gpio26/direction");

while (1)

{

fp=popen("cat /sys/class/gpio/gpio26/value","r");

fscanf(fp,"%s",buf);

if(strncmp(buf,zero,1)==0)

{

printf("\nsoil is wet\n");

system("echo \"1\" >/sys/class/gpio/gpio44/value");

}

else

{

printf ("\nsoil is dry\n");

system("echo \"0\" >/sys/class/gpio/gpio44/value");

}

pclose(fp);

}

}