EMBSYS100 - AU19

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Ans 1.) Home security system is an example of a embedded system, these systems control several systems such as gas leak, Intruder alert, fire alert etc. each sensor has a microcontroller built into it such as a smoke, gas, ir sensor each chip is designed to be programmed to operate for a particular task. A couple of problems I see is there must be constant communication between the all the systems to the home base. If a system fails it must report to the base and the power supply must be constant.

Ans 2.) When doing addition/subtraction on binary numbers in other representations we need to apply different logics (circuits) to perform addition and subtraction. In 2s-complement representation, we represent a positive number as it is and negative number by its corresponding 2s-complement, so we can use the same circuit to perform addition and subtraction.

Disassembly 0x800'090c: 0
0x800'0910: 0
0x800'0912: 0
0x800'0914: 0
0x800'0916: 0
0x800'091a: 0
0x800'091c: 0 Copyright : David Allegre : 2015 : All Rights Reserved #include "main.h" 0x800'091e 0x800'0920 M COM7 - Tera Term VT 0x800'0922 char clr_scrn[] = { 27, 91, 50, 74, 0 }; 0x800'0924 0x800'0928: 0x800'0928: 0x800'092c: 0x800'0930: 0x800'0930: 0x800'0932: 0x800'0934: 0x800'0936: id main() { shay's Nucleo STM32F401 is ... alive!!! ogramning Assignment #1: Built Oct 10 2019 14:44:21. Function Name : main Description : Parameters : main: 0x800'0938: 0 0x800'093a: 0 0x800'093c: 0 PrintString(clr_scrn); /* Clear entire screen */
// Change [My name] to your name
//
PrintString("Akshay"s Nucleo STMS2F401 is ... alive!!!\n");
RETAILMSG(!, ("Programming Assignment #1: Built %s %s.\r\n\r\n", 0x800'0940: 0 0x800'0942: 0x800'0946 0x800'0948: RETAILMSG(1 while (foo) {
 GPIO_ToggleBits(GPIO_PORT_LD2, GPIO_PIN_LD2);
 PrintString("EMBSYS CF100A: University of Washington - UART Test Application \n"); 0x800'094e: 0 0x800'0950: 0 0x800'0952: 0 0x800'0954: 0 delay(1000);
GPIO_ToggleBits(GPIO_PORT_LD2, GPIO_PIN_LD2);

Ans 3.) The image shows the following result.

set with strategy 0 was performed upon: C/Users\siu855621921\Desktop\Hello\World\Hello\World\Debug\Exe\c.out set with strategy 0 was performed