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19CSE303 Embedded Systems
Lab Worksheet - 7
Digital Input and Output

Exercise Problems

1. Write a ARM embedded C program to turn on/off an LED connected to P0.10 using a on/off switch connected in P0.1 in Keil Simulator

```
#include <LPC21xx.H>
```

```
int main()
{
    IODIR0 |= (1<<10);          //Settin P0.10 as output port
    IODIR0 |= (0<<1);           // Setting P0.1 as input port
    while(1) {

        if (IOPIN0 & (1<<1))
            IOSET0 |= (1<<10) ;    //Sending HIGH to P0.10
        else
            IOCLR0 |= (1<<10) ;    //Sending LOW to P0.10

    }
    return(0);
}
```

Assignment Problem

1. Write an ARM embedded C program to control the chasing LED pattern of eight LEDs using on/off switch Keil simulator. If the switch is on then the chasing in forward direction else backward direction.