#include "mbed.h"

#include "TextLCD.h"

BusIn inputs (p5,p6,p7,p16);

BusOut outputs(LED1,LED2,LED3,LED4);

DigitalIn a(p5),b(p6),c(p7),d(p16) ;

int I,O;

int main()

{

 a.mode(PullUp);

 b.mode(PullUp);

 c.mode(PullUp);

 d.mode(PullUp);

 while(1)

 {

 I=inputs;

 O=0;

 if(((I&7)==6)|| ((I&7)==1))

 O=1;

 if(((I&15)==15)|| ((I&15)==8))

 O=O|2;

 if((I&5)==1)

 O=O|4;

 if(((I&10)==8)|| ((I&12)==4))

 O=O|8;

 outputs=O;

 }

}