```
#include "lpc214x.h"
void ADCInit(void)
{
       PINSEL1 &= 0xF0FFFFF;
                                                     //Configure pins P0.28 and P0.29 as ADC
pins
       PINSEL1 |= 0x05000000;
}
unsigned int ADC_Read(unsigned char channel)
{
       static unsigned int ad1_data;
       AD0CR = 0x00200300 | (1<<channel); //Set Burst mode to 0, CLK_DIV, Channels, 10bit
ADC/11 cycles
       AD0CR |= 1<<24;
                                                                    //Start ADC
       while(!(AD0GDR & 0x80000000));
                                                                           //Check DONE bit
       ad1_data = (AD0GDR & 0x0000FFC0)>>6;
                                                                    //Assign ADC result to
ad1_data n display in mV
       return ad1_data;
}
```