

Program For RTC interfacing with LPC 2148:-

```
#include<lpc214x.h>

#include<stdio.h>

#define RTCConPrescaler 1

extern void Uart0Init(unsigned int);

void delay(unsigned int time)
{
    unsigned int i,j;
    for(i=0;i<time;i++)
        for (j=0;j<5000;j++) ;
}

void Uart0Init(unsigned int baudrate)
{
    int i,FDiv;
    i=PINSEL0;
    i=i&0XFFFFFFF0;
    PINSEL0=(i|0x05);
    U0LCR=0X83;

    FDiv=(15000000/16)/baudrate;
    U0DLM=0x00;
    U0DLL=0x61;
    U0LCR=0X03;

    U0TER=0X80;
}

int UART_GetChar(void)
{
```

```

while(!(U0LSR&0X01));
return(U0RBR);
}
int UART_PutChar(unsigned char ch)
{
if (ch=="\n")
{
while(!(U0LSR&0X20));
U0THR=0X0D;
}
while(!(U0LSR&0X20));
return(U0THR=ch);
}
int fputc(int ch,FILE*f)
{
return(UART_PutChar(ch));
}
/*struct__FILE{int handle;};
FILE__stdout;*/
void RTCInit(void)
{
CIIR=0X00;

PREINT=0X16D;
PREFRAC=0X1B00;
CCR=0X02;

CCR=0x02;

```

```
}  
  
void SetTime(int hours,int mins,int sec)  
{  
    SEC=sec;  
    MIN=mins;  
    HOUR=hours;  
    CCR=0X01;  
}  
  
int main(void)  
{  
    Uart0Init(9600);  
    RTCInit();  
    SetTime(5,30,01);  
    while(1)  
    {  
        printf("\nThe Time is");  
        printf("%02d",HOUR);  
        printf(":%02d",MIN);  
        printf(":%02d",SEC);  
        delay(1024);  
    }  
  
    return(0) ;  
}
```