```
/** VARIABLE DECLARATION **/
bit tx_flag=0;


/** USART FUNCTIONS DECLARATION **/
void tx(unsigned char);
void USART_Transmit(unsigned char flash *);
void USART_int(int);
void USART_float(float);


// USART Transmitter interrupt service routine
interrupt [USART_TXC] void usart_tx_isr(void)
{
   tx_flag=1;
}



/** TRANSMITT CHARACTER TO HYPER TERMINAL **/
void tx(unsigned char ch)
{
            UDR0=ch;
            tx_flag=0;
            while(!tx_flag);
            tx_flag=0;
}


/** TRANSMITT STRING TO HYPER TERMINAL **/
void USART_Transmit(unsigned char flash *s)
```

```
{
    while(*s)
        tx(*s++);
}

/** TRANSMIT INTEGER TO HYPER TERMINAL **/
void USART_int(int n)
{
    unsigned char c[6];
    unsigned int i=0;
    if(n==0)
    tx('0');
    while(n>0)
    {
    c[i++]=(n%10)+48;
    n/=10;
    }
    while(i-->=1)
    tx(c[i]);
}

/**USART FLOAT FUNCTION**/
void USART_float(float f)
{
    int n;
    float temp;
    if(f<0.0)
```

```
        {
          tx('-');
          f=-f;
        }
        n=f;
        USART_int(n);
        tx('.');
        temp=f-n;
        if(temp>=0.00&&temp<=0.09)
        tx('0');
        f=temp*100;
        n=f;
        USART_int(n);
}
```