Program to interface Xbee(Receiver) with LPC 2148:-

```c
#include <stdio.h>
#include <LPC214x.h>


unsigned char UART0_GetChar(void)
{
      while(!(U0LSR & 0x01));
      return(U0RBR);
}


unsigned char UART1_GetChar(void)
{
      while(!(U1LSR & 0x01));
      return(U1RBR);
}


unsigned char UART0_PutChar(unsigned char Ch)
{
      while(!(U0LSR & 0x20));
      U0THR = Ch;
      return Ch;
}


unsigned char UART1_PutChar(unsigned char Ch)
{
```

```c
        while(!(U1LSR & 0x20));

        U1THR = Ch;

        return Ch;

}

void UART1_isr(void)

{

        UART0_PutChar(UART1_GetChar());

        VICVectAddr = 0;

}

void Uart0Init(unsigned int baudrate)

{

        unsigned int FDiv;

        PINSEL0 |= 0x00000005;        //Enable RxD0 and TxD0

  U0LCR = 0x83;            // 8 bits, no Parity, 1 Stop bit

        FDiv = (15000000 / 16 ) / baudrate ; //

        U0DLM = FDiv /256;                              //0x00;

        U0DLL = FDiv %256;                                 //0x97;

  U0LCR = 0x03;                            // DLAB = 0

}

void Uart1Init(unsigned int baudrate)

{

        unsigned int FDiv;

        PINSEL0 |= 0x00050000;        //Enable RxD1 and TxD1

  U1LCR = 0x83;            // 8 bits, no Parity, 1 Stop bit

        FDiv = (15000000 / 16 ) / baudrate ; //

        U1DLM = FDiv /256;                              //0x00;

        U1DLL = FDiv %256;                                 //0x97;

  U1LCR = 0x03;                            // DLAB = 0
```

```c
        U1IER = 0x01;

        VICVectCntl1 = 0x20 | 7;

        VICVectAddr1 = (unsigned int)UART1_isr;

        VICIntEnable |= 1<<7;

}


void UART1_PutS(unsigned char *Ch)

{

        while(*Ch)

                UART1_PutChar(*Ch++);

}




int fputc(int ch, FILE *f) {

 return (UART0_PutChar(ch));

}




void delay(unsigned int time)

{

        unsigned int i,j;

        for(i=0;i<time;i++)

                for(j=0;j<10000;j++);

}


void xbeeString(unsigned char *ch)                //function to send a command to zigbee
```

```c
{
        printf("\r\ncommand: %s",ch);
        printf("response:");
        UART1_PutS(ch);
}




void delay(unsigned int time)
{
        unsigned int i,j;
        for(i=0;i<time;i++)
                for(j=0;j<10000;j++);
}

void xbeeString(unsigned char *ch)              // fuction to send a string to Zigbee
{
        printf("\r\ncommand: %s",ch);
        printf("response:");
        UART1_PutS(ch);
}

int main()
{
        Uart0Init(9600);
        Uart1Init(9600);
        xbeeString("+++");                                      //enter command mode
        delay(1000);
```

```c
        xbeeString("AT\r\n");                    //check if all ok
        delay(1000);
        xbeeString("ATID 10\r\n");               //change network id to 10     (or 15)
        delay(1000);
        xbeeString("ATCN\r\n");                  //exit command mode
        delay(1000);


        while(1);
}
```