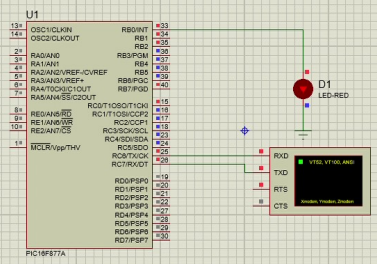
File Edit View Tool Design Graph Debug Library Template System Help

Schematic Capture

DEVICES

LED-RED

PIC16F877A



```
#include<pic.h>
#define _XTAL_FREQ 20000000


void UART_Init()
{
  TXSTA = 0x24; // Enable Transmit
  RCSTA = 0x90; // Enable Serial Port
  SPBRG = 129;  // Baud Rate 9600
}


void UART_Send(char data)
{
  while(!TXIF); // Wait for TX buffer empty
  TXREG = data;
}


char UART_Receive()
{
  while(!RCIF); // Wait until data is received
  return RCREG;
}


void main()
{
  TRISB = 0x00; // Set PORTB as output
  TRISC = 0x80; // RX as input
  UART_Init();
```

```
  while(1)
  {
     char command = UART_Receive(); // Receive voice command


     if(command == '1')  // If "Turn ON" command detected
        RB0 = 1;         // Turn ON LED
     else if(command == '0')  // If "Turn OFF" command detected
        RB0 = 0;         // Turn OFF LED
  }
}
```