Chapter 3 – Hardware Interfacing

Communication: USART

```c
void action(unsigned char c){
  switch(c){
  case 'n':
    PORTC|=0x0f; //on PC0-PC3.
    LED_ON
    break;
  case 'f':
    PORTC&=0xf0; //off PC0-PC3.
    LED_OFF
    break;
  case '1': case '2': case '3': case '4':
    PORTC^=(1<<(c-'1'));
    blink(c-'0');
    break;
  }
}
```

```c
int main(void){
  DDRC=0xFF; //use C to show UDR.
  PORTC=0x00; //logic 0 to PORTC
  DDRB=0xFF; //for LED blinking

  init_usart(115200);
  sei(); //enable global interrupt.

  while(1){
    if(0<=cmd){
      UDR0=(unsigned char) cmd;
          //echo
      action((unsigned char) cmd);
      cmd=-1; //clear buffer
    }
  }
}
```

connect to WIFI