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# PRACTICAL REPORT

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For IoT Practical



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## 4.3 Serial Communication – Receiving Serial Data

User enters the integral value from 0- 9 and according to the input LED will blink.

### **Arduino Code:**

```
int LEDPin = 13;
int baudRate = 9600;

void setup()
{
    pinMode(LEDPin, OUTPUT);
    /* Established Serial Communication. */
    Serial.begin(baudRate);

    Serial.println("Connection Establishing connection...!");
    while(!Serial){}
    Serial.println("Connection Established!");

    /* Wait until Serial Communication not established. */
    while(!Serial){}

    /* Send data through Serial Communication. */
    Serial.println("- Name of Author : DSP -");
    Serial.println("-----");
}

void loop()
{
    char ch;
    Serial.println("Waiting for integral data from 0 to 9...");
    while(Serial.available() == 0){}
    if(Serial.available() > 0 )
    {
        ch = Serial.read();

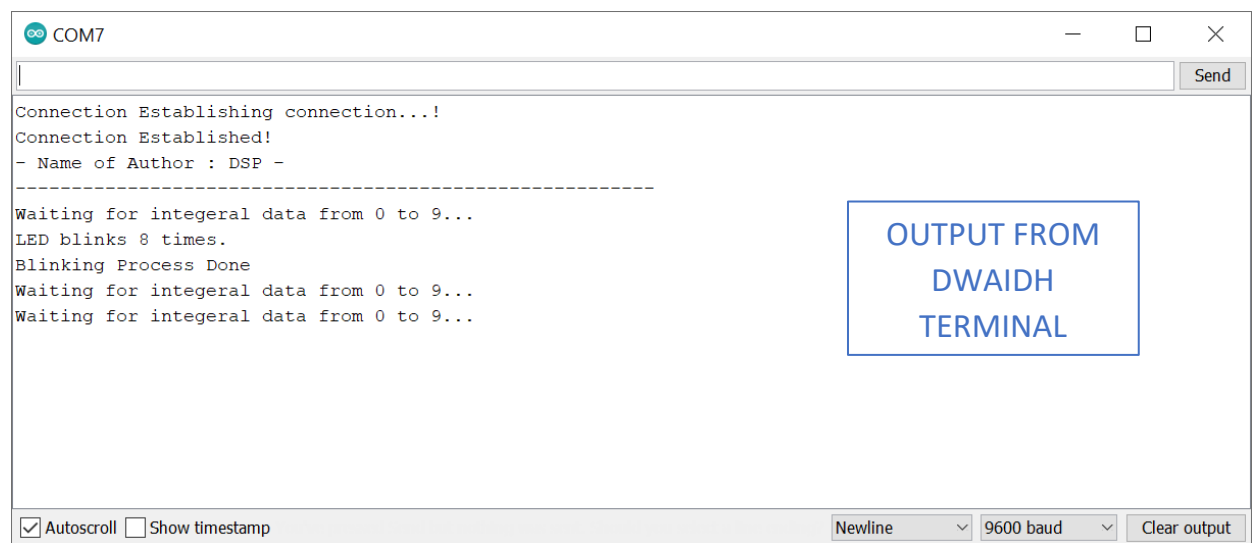
        if(isDigit(ch))
        {
```

```

Serial.print("LED blinks ");
Serial.print(ch - '0');
Serial.println(" times.");
for(int i = 0; i < ch - '0'; i++)
{
    digitalWrite(LEDPin, HIGH);
    delay(1000);
    digitalWrite(LEDPin, LOW);
    delay(1000);
}
Serial.println("Blinking Process Done");
}
}
}

```

#### Output:



```

COM7
Connection Establishing connection...!
Connection Established!
- Name of Author : DSP -
-----
Waiting for integral data from 0 to 9...
LED blinks 8 times.
Blinking Process Done
Waiting for integral data from 0 to 9...
Waiting for integral data from 0 to 9...

```

OUTPUT FROM  
DWAI DH  
TERMINAL

☒ Autoscroll ☐ Show timestamp Newline 9600 baud Clear output