

/*

Experiment No. : 09

Statement : Lit the LED with brightness equal to 0%, 25%, 50%, 75%, 100% via serial monitor window.

Date of Exp. : xx/xx/xxxx

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*/

```
void setup() {
```

```
  pinMode(3,OUTPUT); // Set pin 3 as an OUTPUT
```

```
  Serial.begin(9600); // Initialize serial communication at a baud
  rate of 9600
```

```
}
```

```
void loop(){
```

```
  if (Serial.available()>0) // Check if there's data available in
  the serial buffer
```

```
  {
```

```
    char key= Serial.read(); // Read a character from the serial
    buffer
```

```
    if(key=='A') // Check the received character and control the
    LED brightness
```

```
      analogWrite(3,0); // Turn off the LED
```

```
    else if(key=='B')
```

```
      analogWrite(3,63); // Set LED brightness to 25%
```

```
    else if(key=='C')
```

```
        analogWrite(3,127); // Set LED brightness to 50%
    else if(key=='D')
        analogWrite(3,190); // Set LED brightness to 50%
    else if(key=='E')
        analogWrite(3,255); //Set LED brightness to 100%
    }
}
```

