



**Linnéuniversitetet**  
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## Lab Report

# Lab 4

*Arduino UNO, REV 3 – ATmega 328p*



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*Semester:* HT19  
*Course Code:* 1DT301



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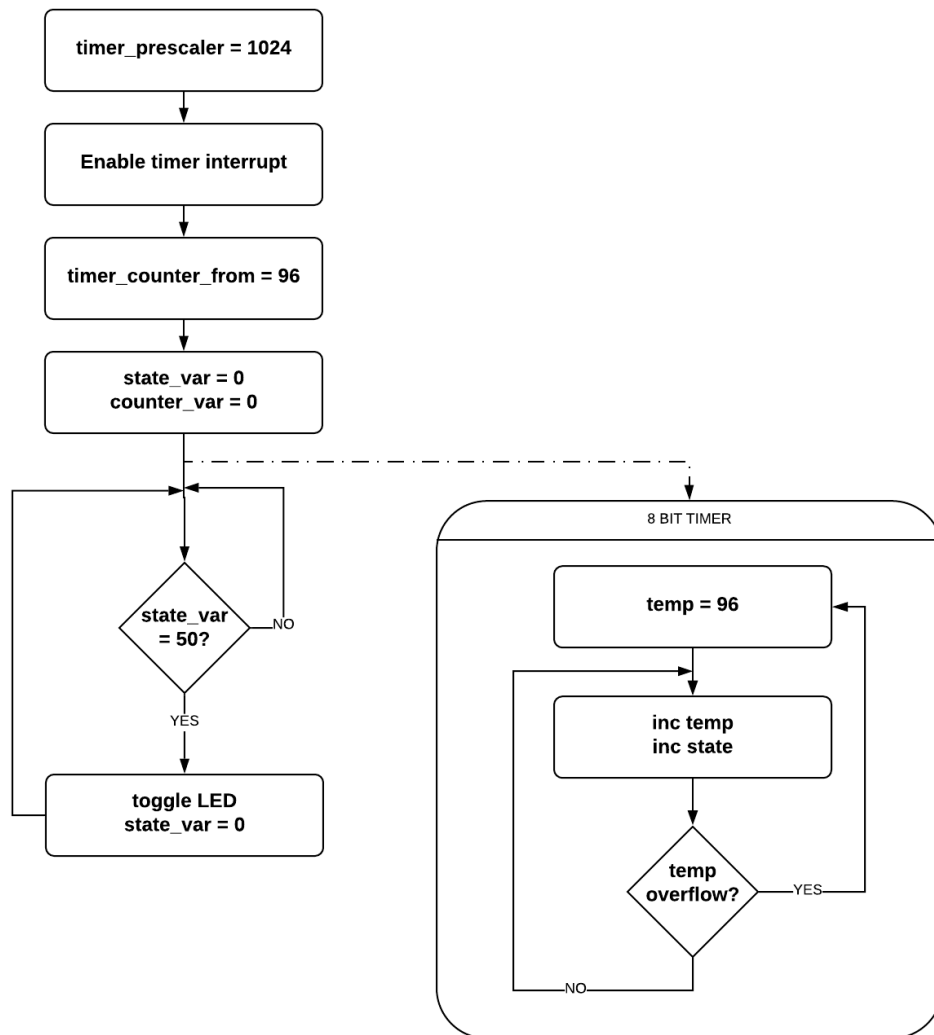


## Task I

### Description

This program illustrates a square wave generator with 1 second period where the led is on 50% of the time and off 50% of the time.

### Flowchart



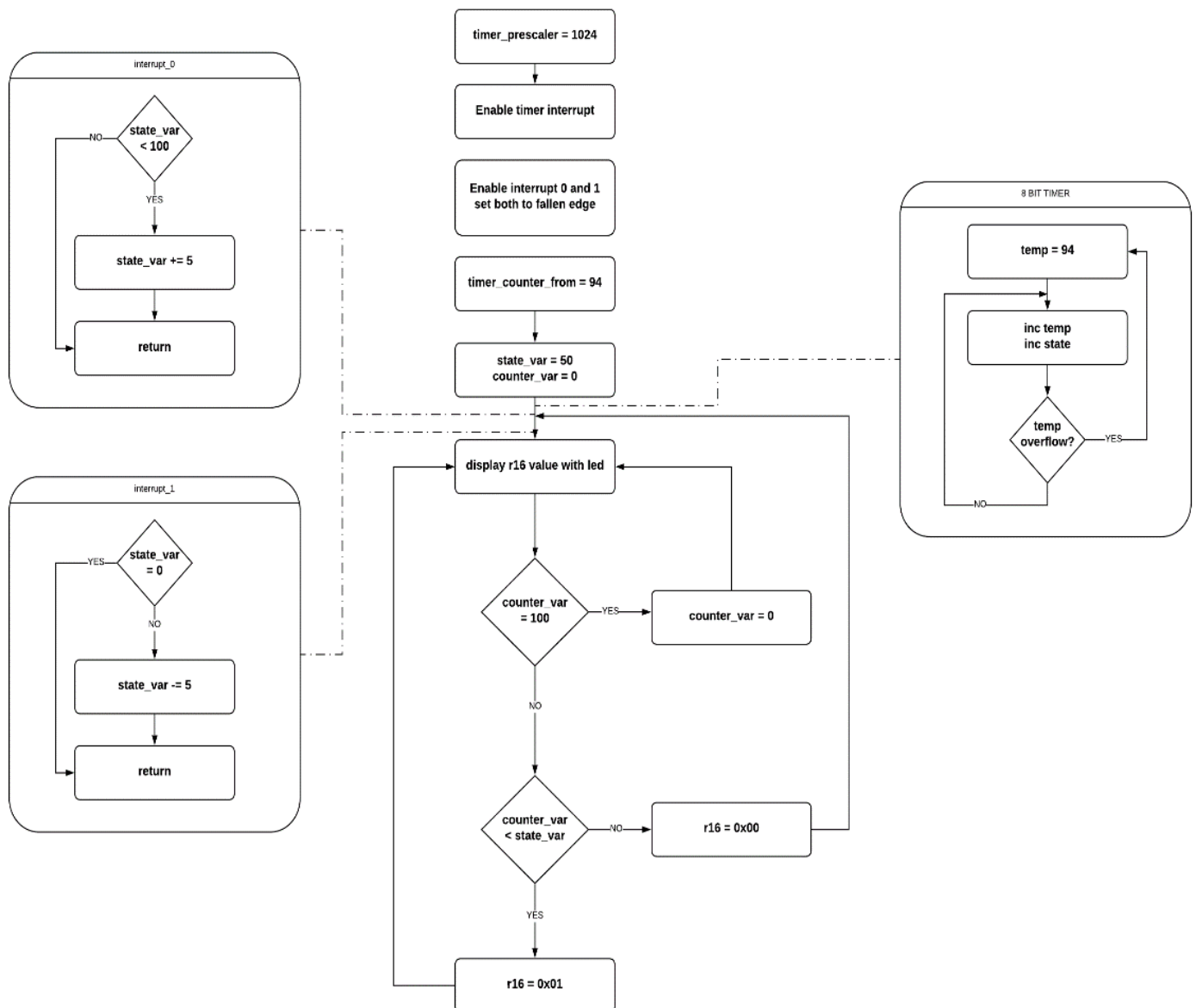


## Task II

### Description

This program allows the user to control the duty cycle by pushing two different buttons. One increase the duty cycle by 5% and the other one decrease by 5%.

### Flowchart



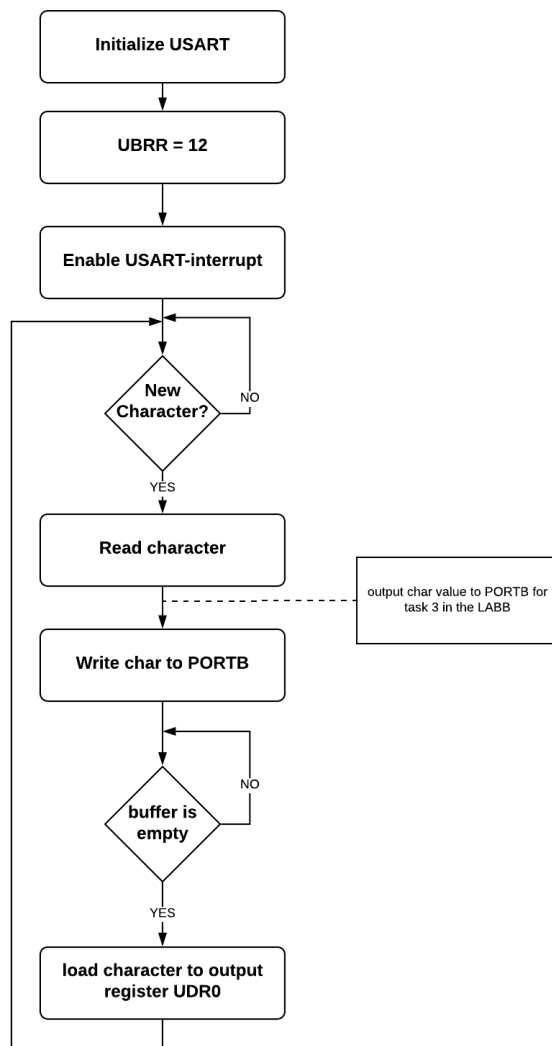


## Task IV

### Description

This program expect an input from a data source and outputs the input to the console.

### Flowchart





## Task V

### Description

This program expects a input from a data source and outputs the input to the console, just like task 4 but instead using interrupt.

### Flowchart

