

Project 01

Building simple

Monostable using 555

IC

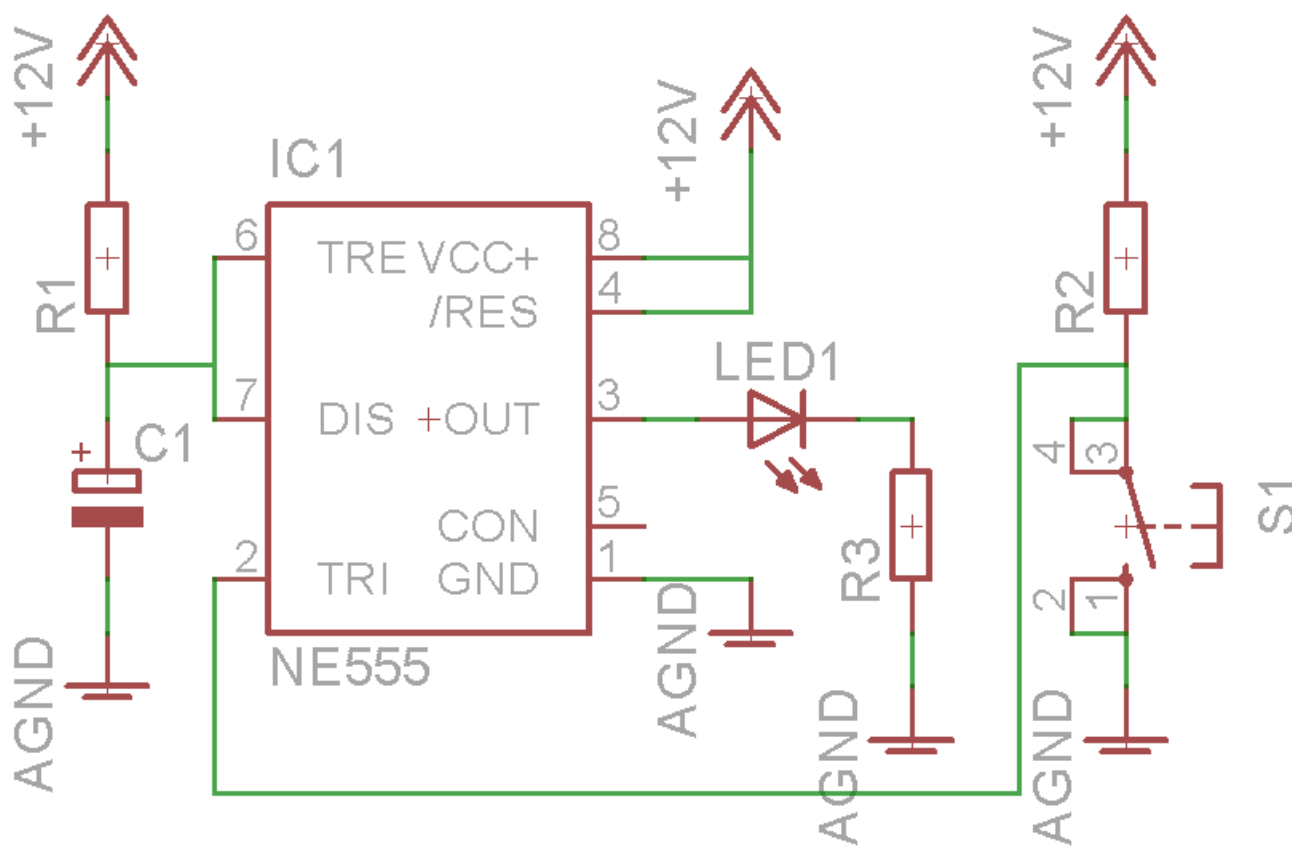
#	Student ID	Student Name	Grade (10)
1			

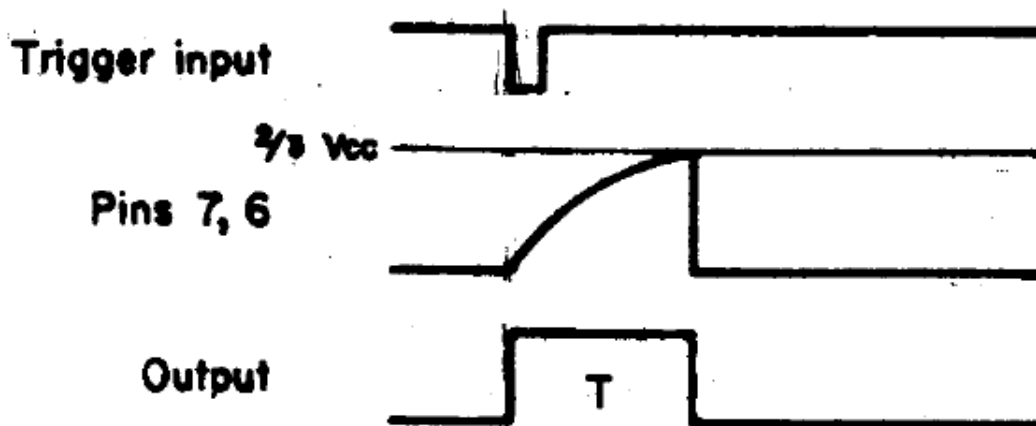
Delivery Date	
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١. يتم تسليم المشروع في خلال أسبوعين من تاريخ عرضة (٢٠١٦/١٠/١٠)، و يتم حذف درجتان و نصف من المشروع عن كل أسبوع تأخير ٢. يتم تسليم المشروع لمعيد المقرر مباشرة

1. Monostable Operation

In this mode, the timer generates a fixed pulse whenever the trigger voltage falls below $V_{cc}/3$. When the trigger pulse voltage applied to the #2 pin falls below $V_{cc}/3$ while the timer output is low, the timer's internal flip-flop turns the discharging Transistor off and causes the timer output to become high by charging the external capacitor C1 and setting the flip-flop output at the same time.









$$T = 1.1 \times R_t \times C_t$$

The period

$$T = 1.1 \times R_t \times C_t$$



Components list

#	Q	item	link	image
1	1	555	http://ram-e-shop.com/oscmx/catalog/product_info.php?products_id=609	
2	3	Resistor = 10K ohm (R1, R2)	http://ram-e-shop.com/oscmx/catalog/product_info.php?cPath=31_46_69&products_id=383	
3	1	Capacitor = 10 uF	http://ram-e-shop.com/oscmx/catalog/product_info.php?cPath=30_88&products_id=485	
4	1	Capacitor = 100 uF	http://ram-e-shop.com/oscmx/catalog/product_info.php?products_id=504	


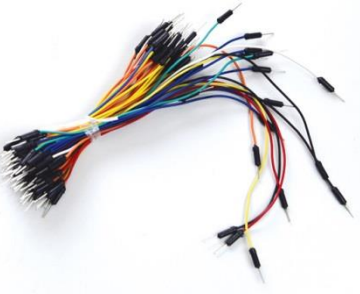



5	2	Led 5mm	http://ram-e-shop.com/oscmx/catalog/product_info.php?cPath=60&products_id=227	
6	2	Resistor = 1K R3	http://ram-e-shop.com/oscmx/catalog/product_info.php?cPath=31_46_69&products_id=342	
7	1	Bread board	http://ram-e-shop.com/oscmx/catalog/product_info.php?products_id=164	



8	1	Power supply	<p>http://ram-e-shop.com/oscmx/catalog/product_info.php?products_id=1394</p> <p>or</p> <p>http://ram-e-shop.com/oscmx/catalog/product_info.php?products_id=1106</p>	
9	1	Power socket 2 bead board	<p>http://ram-e-shop.com/oscmx/catalog/product_info.php?products_id=1203</p>	



10	1	wires	<p>http://ram-e-shop.com/oscmx/catalog/product_info.php?products_id=221</p> <p>or</p> <p>http://ram-e-shop.com/oscmx/catalog/product_info.php?products_id=3183</p>	 
11	1	press	<p>http://ram-e-shop.com/oscmx/catalog/product_info.php?products_id=1568</p>	



Implementing Monostable on a bread board

