Prelab				Lab 4				
	Probl	em 1	Joshua Ayers	Date:				
C =	330	NF	TA sig					
R_L =	33	KOhmns		<u>'</u>	Objective			
V =	5	Rms	The objective of	of this lab is learn al	bout bridge rectify	yers		
f =	60	Hz			Materials			
A			NI ELVIS II					
f_ripple = 2 f =	120	HZ	EMONA SIGEX	Signal & Systems a	dd-on board			
В			Assorted patch	leads Two BNC -	2mm leads			
V =Vin-Va =	5-2(0.7)		Diodes					
			330mF					
			0.57	4 Ohmn resistor				
С					Results			
Vpp =V/(fCR_I)=	43.388mV		Table 4.1 Resu	Its for full wave brid	lge rectifyer			
				Agilent Technologies InfiniiVisi 2 00V/ 2 10e/ utoscale Menu Undo Autoscale Fast Debug	On MSO-X 2002A Mixed Signal Oxcilloscope 0.0s 10.0 Channels Acq Mode Normal	70 MHz 2 05a/s 5 1 2.59V KEYSICHT TECHNOLOGIS B Acquisition B Normal 500kSa/s E Channels E OC 1.00.1 DC 1.00.1 DC 1.00.1 DC 1.00.1 T Measurements E Pk-Pk(1): 7.2V Pk-Pk(2): 10.1mV Amp(1): 7.0V Mac(1): 6.15V	Horizontal Horizontal Bearch Trigger Trigger Trigger Tools Lavel Tools Ver Triger Tools Tools	

					3000	
		W		MCO V 2000A		
		Agilent Tea	chnologies InfiniiVision	MSO-X 2002A Mixed Signal Oscilloscope	70 MHz MEGA OOM	Horizontal Horiz
		<u>1 5.00V/ 2</u>	200†/	0.0s 5.000 s /	Auto £ 1 2.95V	Search
					KEYSIGHT TECHNOLOGIES	Push for Fine Navigate
					# Acquisition # Normal 1.00MSa/s	Trigger Push for 50%
		1 <u>p</u> 1				
					:: Channels :: DC 1.00:1 DC 1.00:1	Push to Select Level Tool
			\wedge	\wedge	: Measurements ::	Utility

Pk-Pk(1): 8.0V Pk-Pk(2): 640mV Amp(1): 7.7V Max(1): 6.8V Pcobe Gen Out DIGITAL Probe Comp
A 5
Avg frequncy of full wave recitfyer: 60Hz
Average Voltage of full wave rectifyer:
0.0105 V
Capacitor discharge time:
0.018 s
V/time=
0.5833333333
Capactor value:
0.33 F
0.1925 A
I_rs
0.000000206 AAC
Scaling factor
~10^(8)
Current across the load resistor;
0.04044 A

	V_out/R_out					
	0.000003181	318				
		Conclusion				
	We learned a	We learned about full bridge recifiers				