



Department Of electrical and computer Engineering  
ENEE2103 CIRCUITS AND ELECTRONICS LABORATORY

Experiment No.7 Prelab

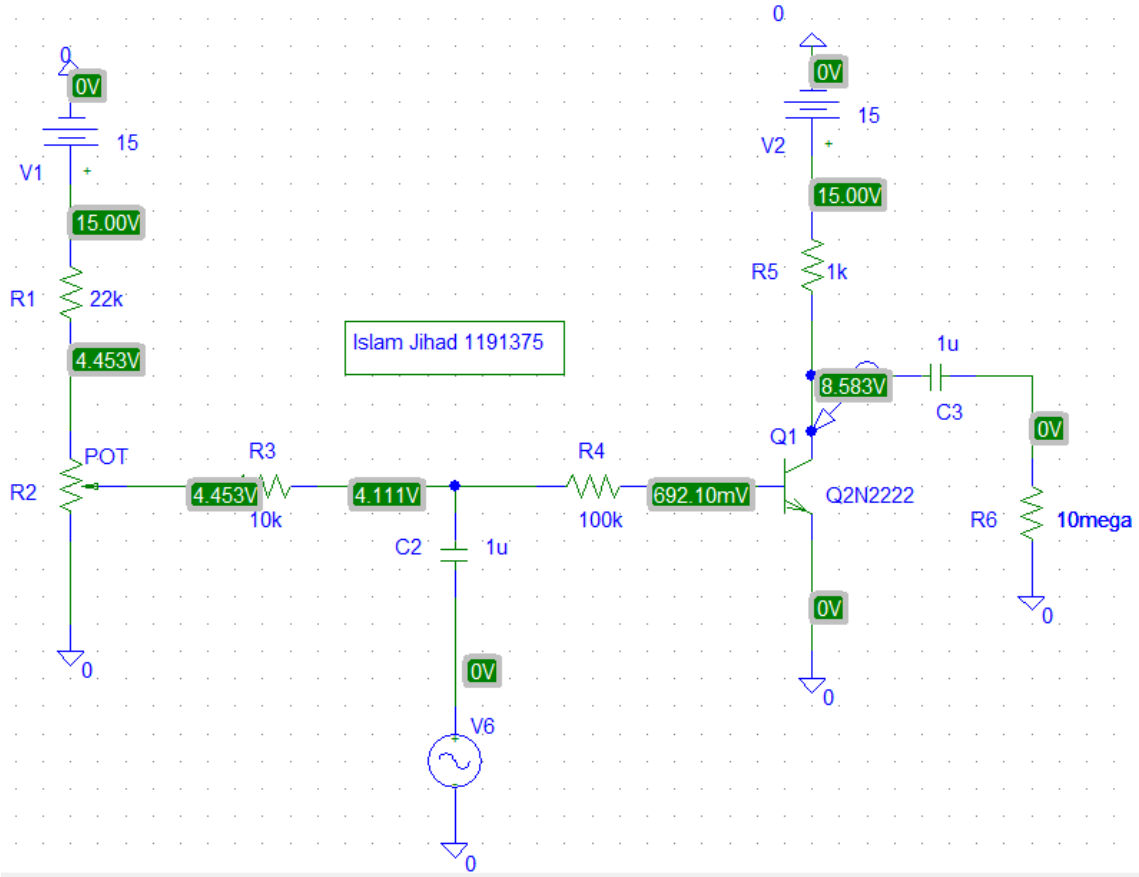
Instructor: Dr. Alhareth Zyoud

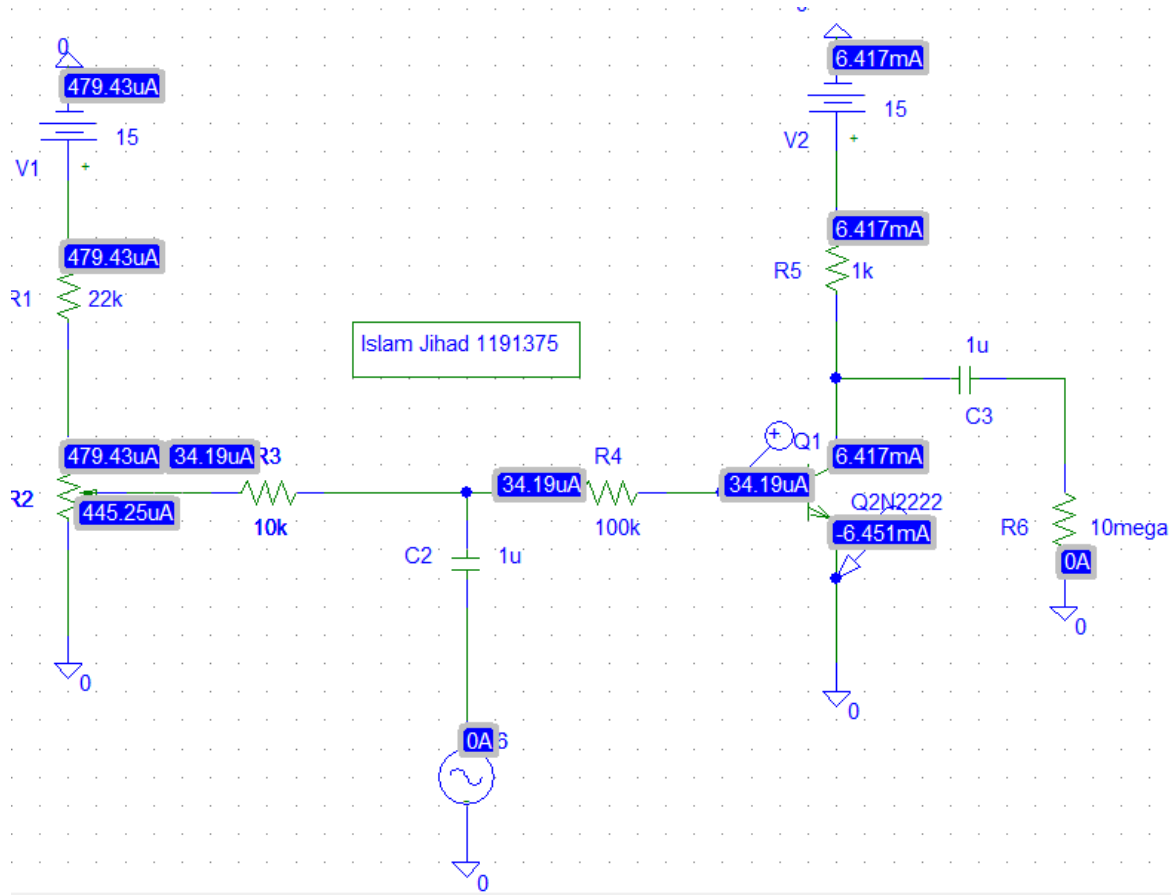
Made By: Islam Jihad

ID: 1191375

TA: MR. Ismail Abualia

Date: 3/10/2021

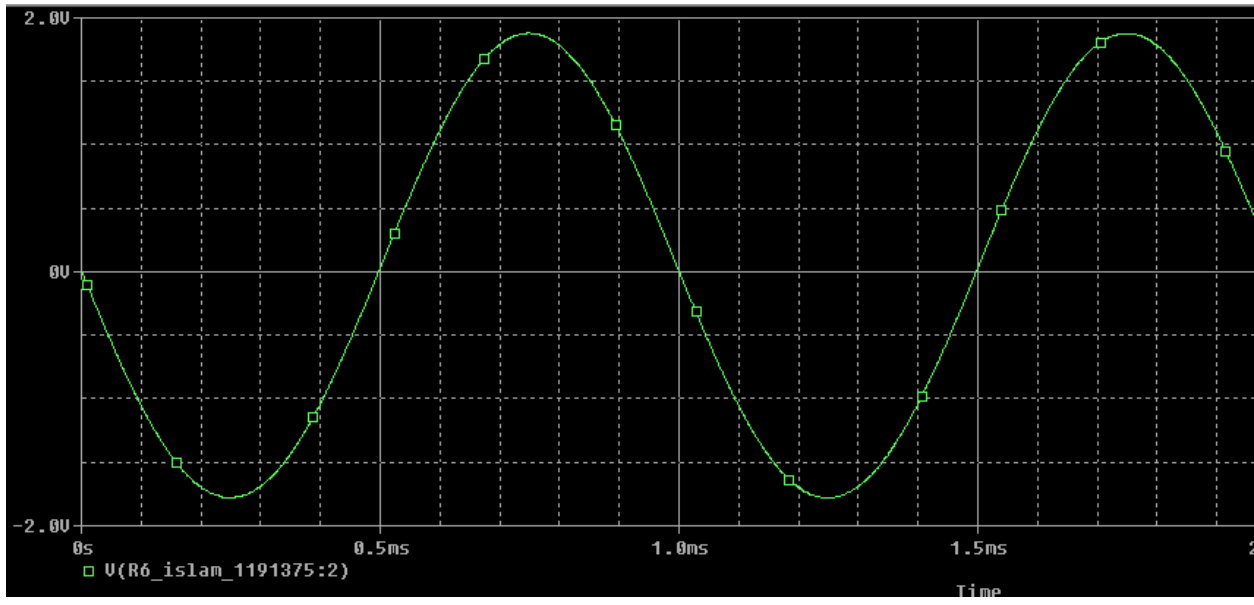




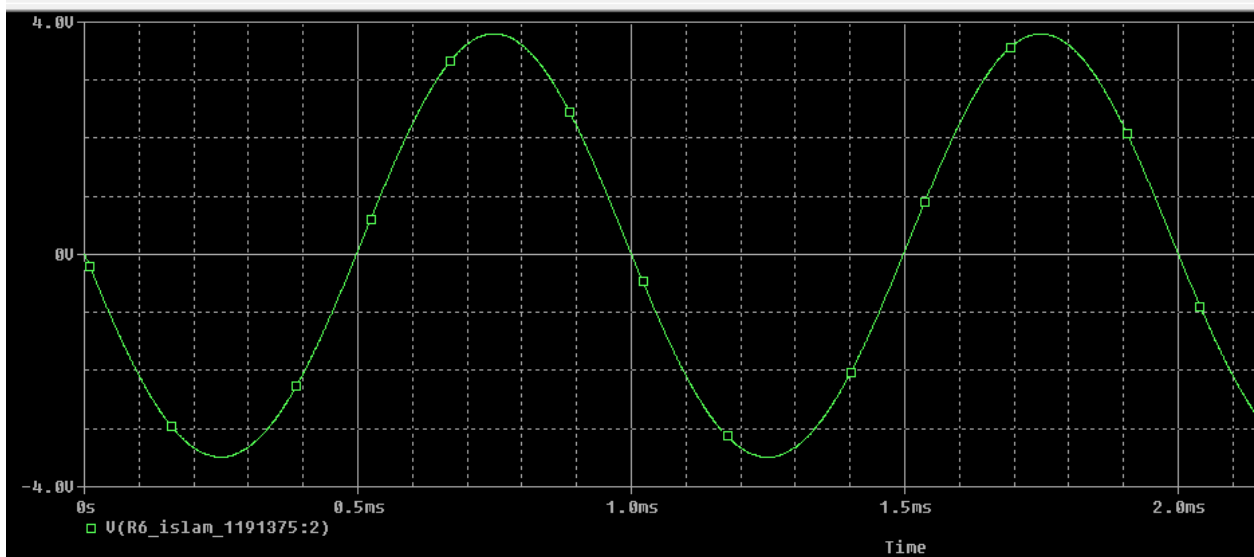
$V_{ce}=8.5828V$

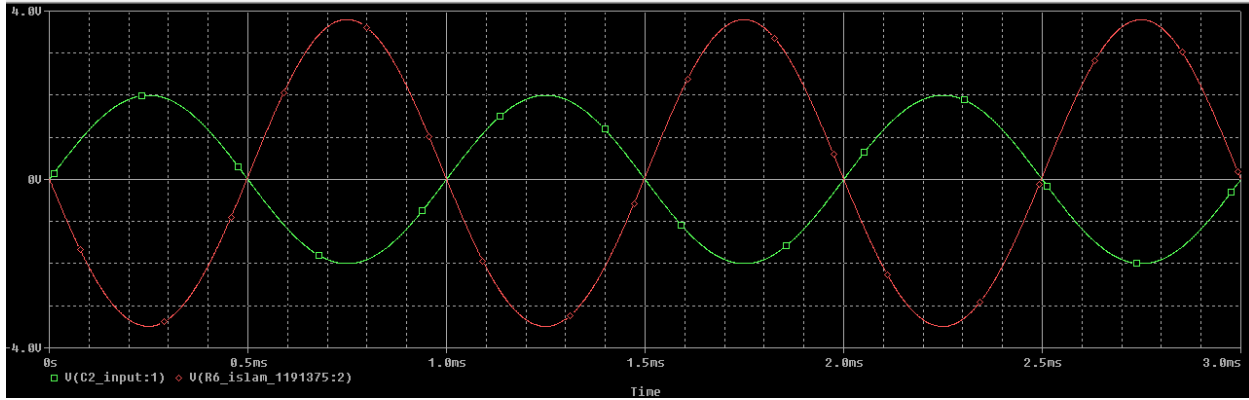
$V_{be}=0.7V$

$V_{in}=1:$



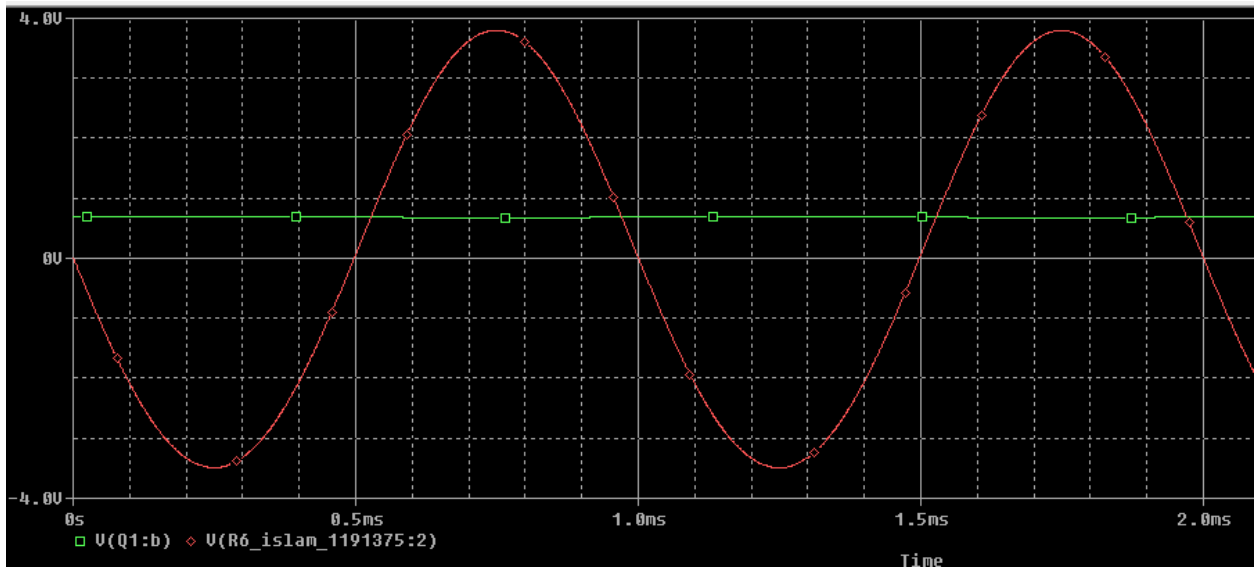
Changed the amplitude for Vin to 1V





$$A_v = V_o(t) / V_i(t)$$

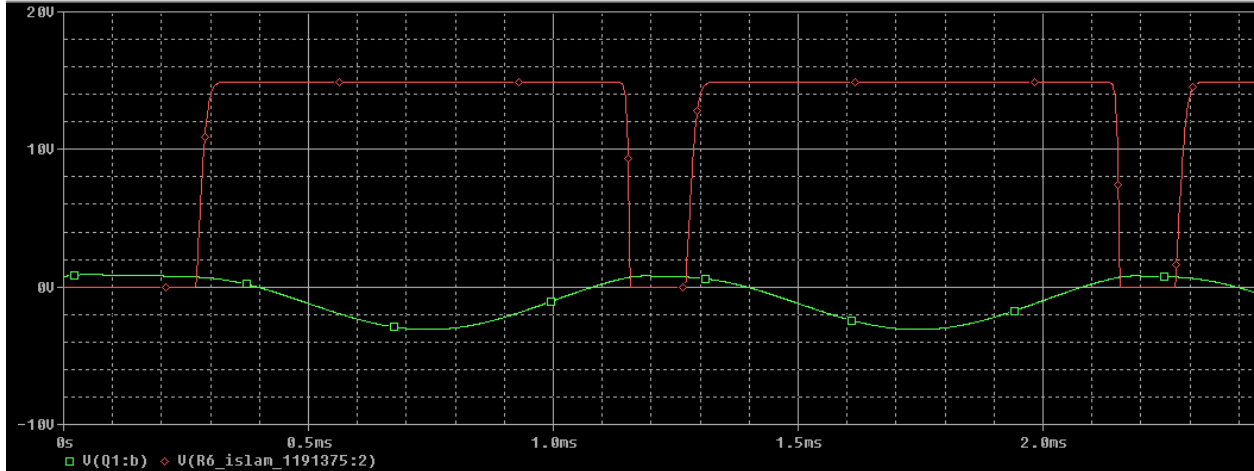
$$A_v = 4/2 = 2v$$



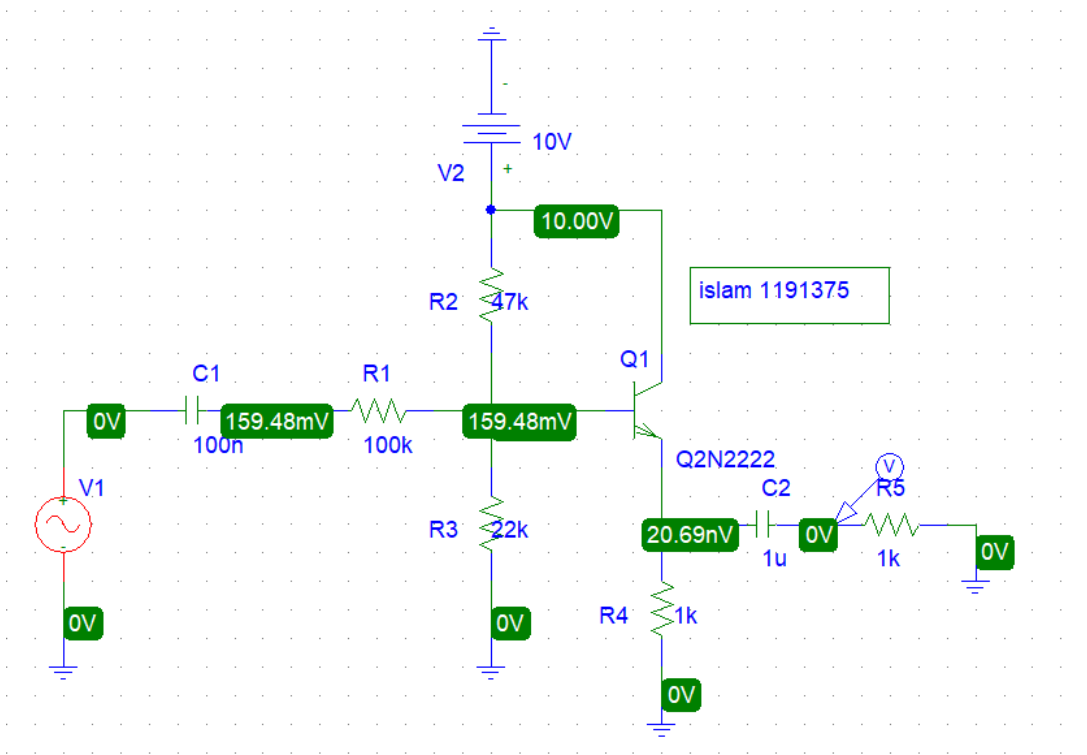
$$A_{v1} = V_o(t) / V_B(t)$$

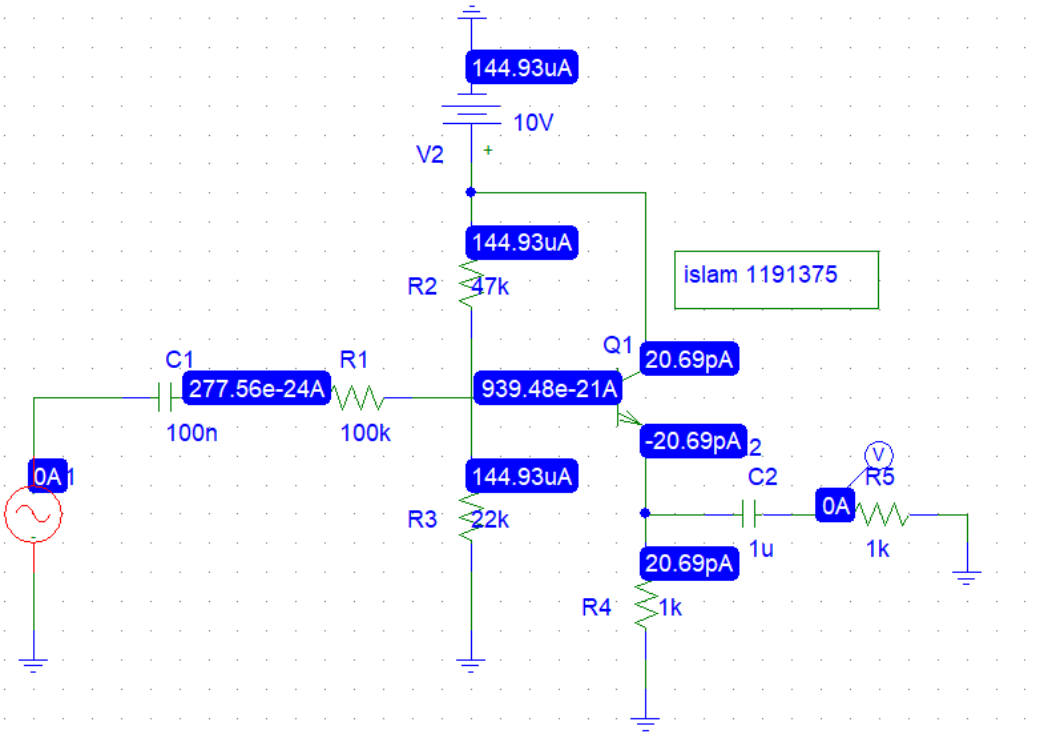
$$A_{v1} = 4/0.7 = 5.71V$$

7.

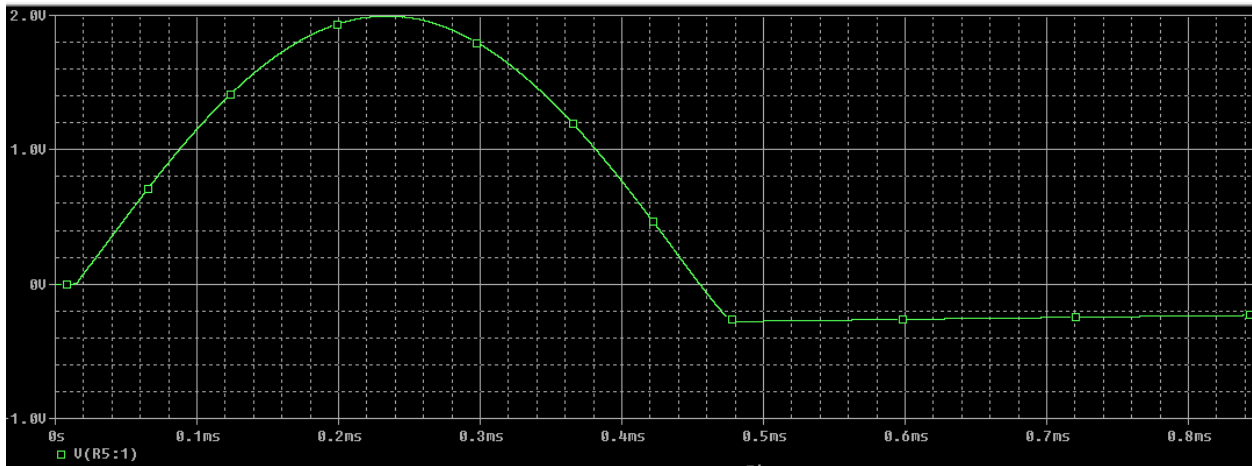


**I. COMMON COLLECTOR TRANSISTOR AMPLIFIER.**

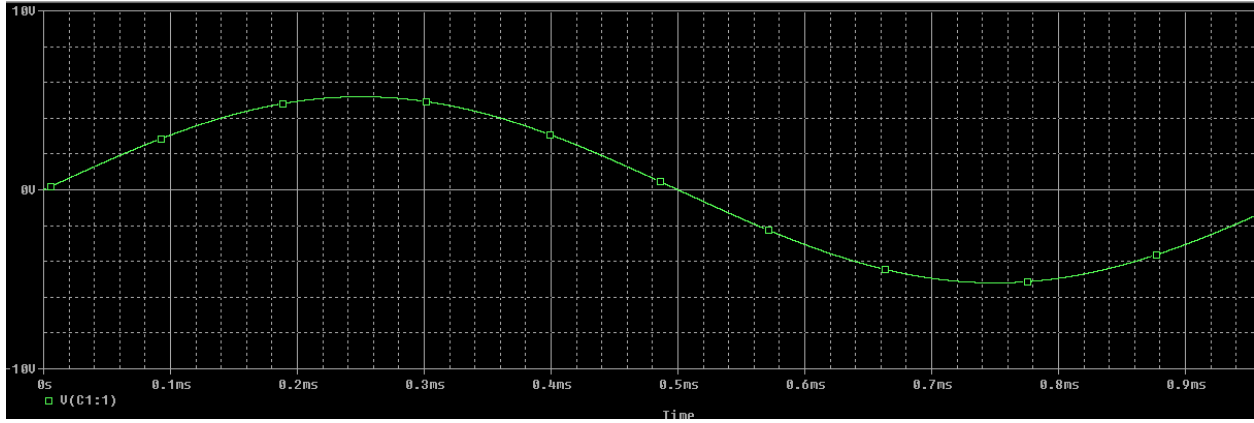




The output=2 when the Vsin amp=5.2



The needed input ac value:



Quantity	Measured values
$V_{in}$	
$V_{out}$	
$i_{in}$	
$i_{out}$	
	<b>Calculated values</b>
$A_V = V_{out}/V_{in}$	
$A_i = i_{out}/i_{in}$	
$Z_{in} = V_{in}/i_{in}$	
$Z_{out}$	



