

EC160 LAB 9

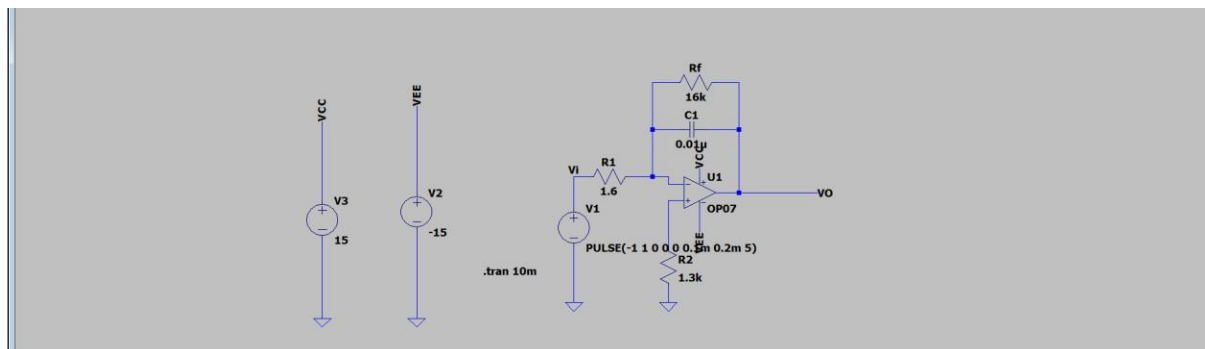
Name : Snehal Keshav Nalawade
ID : 202151160

Aim : Operational amplifier: Integrator and Differentiator

Observations :

1) Circuit diagram:

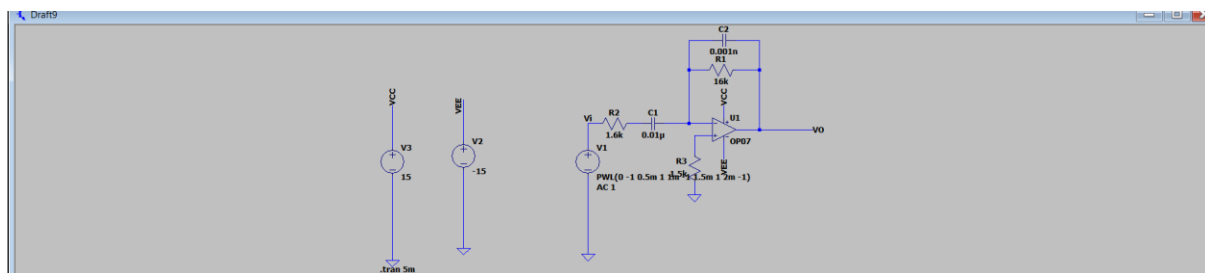
Integrator circuit:



$R1=1.6\text{ohm}$, $R_f=16\text{kohm}$, $R2=1.3\text{kohm}$,

$C1=0.01\mu\text{F}$

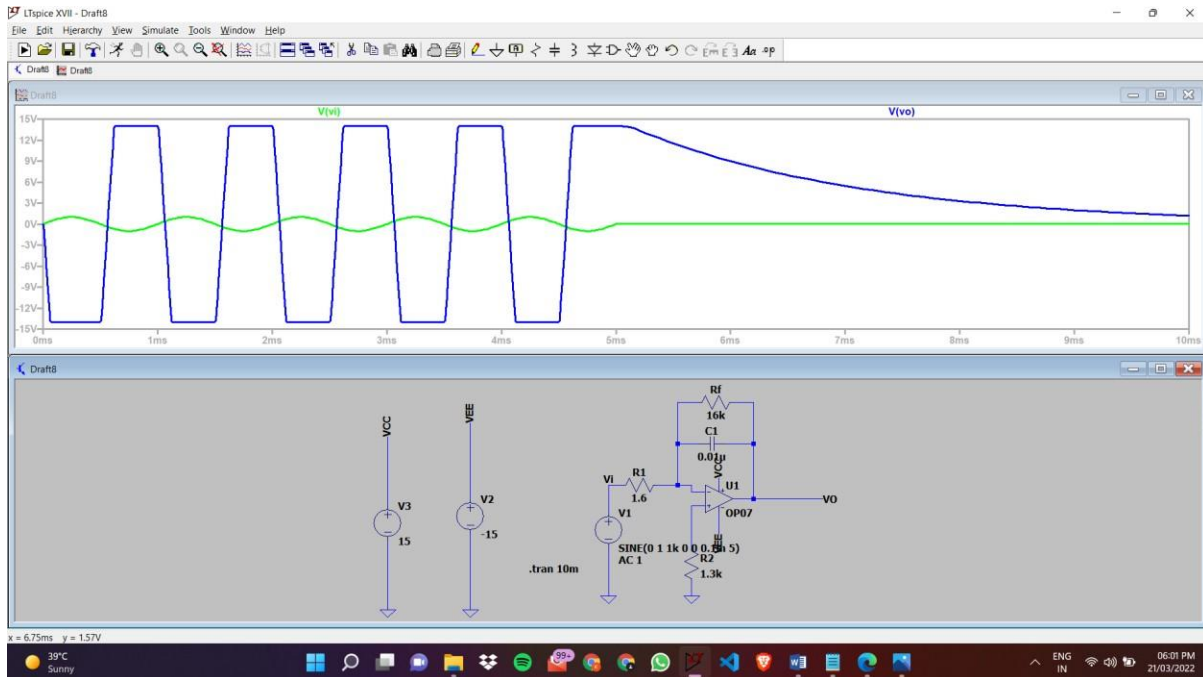
Differentiator circuit:



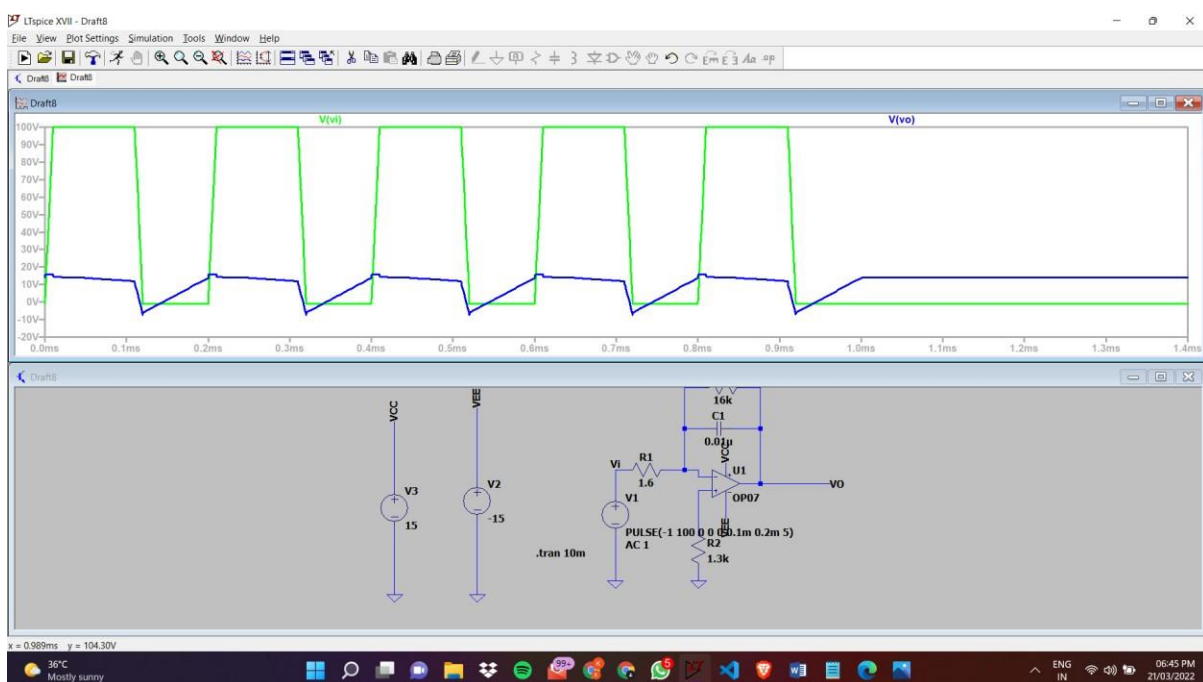
$R1=16\text{kohm}$, $R2=1.6\text{kohm}$, $R3=1.5\text{kohm}$, $C1=0.01\mu\text{F}$, $C2=0.001\text{Nf}$

2. Observations with integrator circuit:

Sinusoidal input and its output

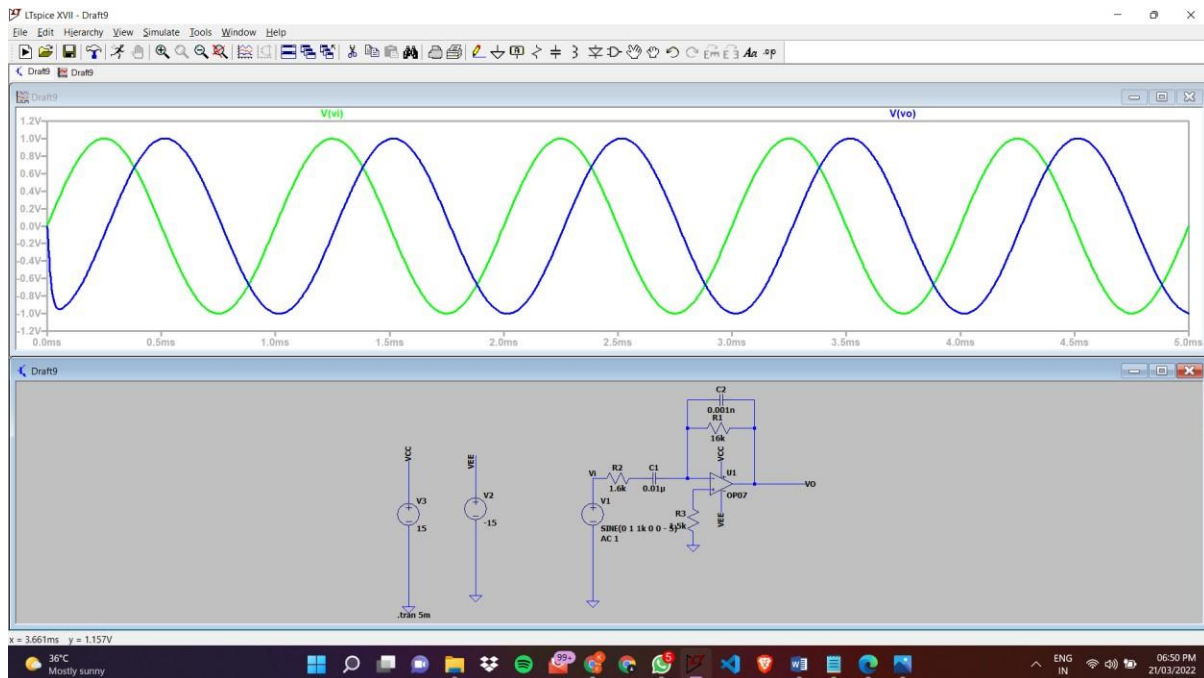


Square input and its output

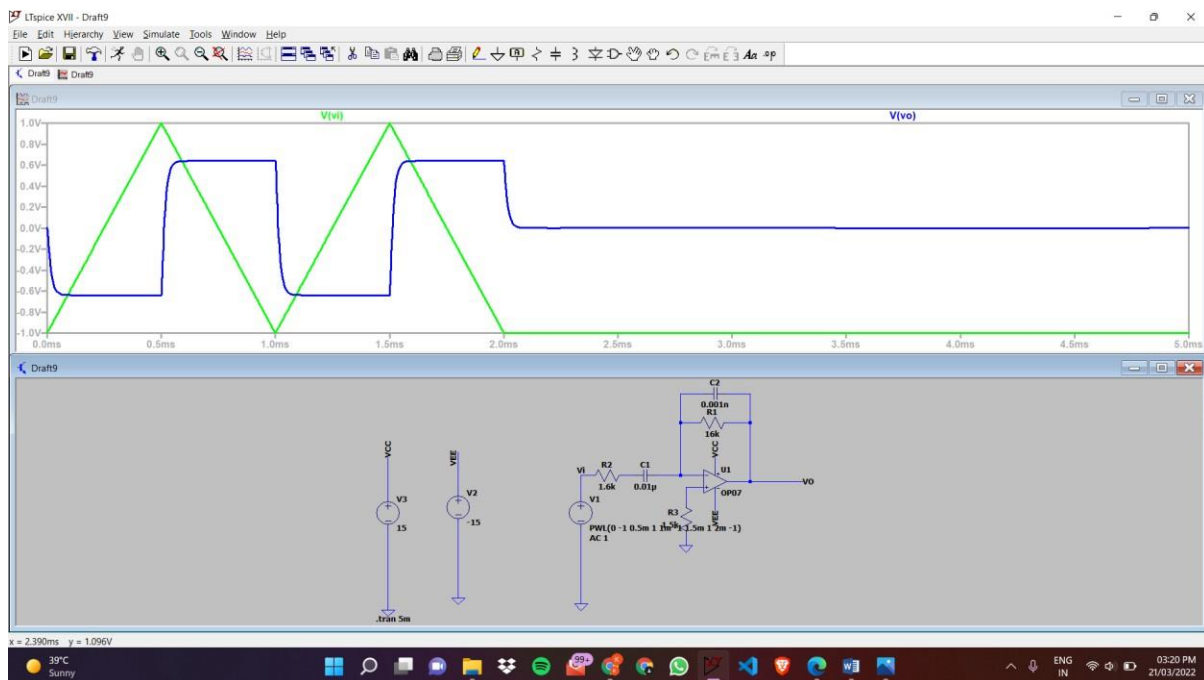


3. Observations with Differentiator circuit:

Sinusoidal Input



Triangular Input



Thank you