Code to generate waveforms 1:-

% Check if the variable exists

if exist('scopeLoggedData', 'var')

% Extract time and signal values

timeData = scopeLoggedData.time;

signalData = scopeLoggedData.signals.values;

% Plot the waveform

figure;

plot(timeData, signalData, 'LineWidth', 1.5);

title('Waveform from Simulink Scope');

xlabel('Time (seconds)');

ylabel('Amplitude');

grid on;

else

error('The variable "scopeLoggedData" does not exist. Make sure logging is enabled on the scope.');

end

**wavedorm output voltage with capacitor**

capacitor is 2.73uf









**Without capacitor**

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**Pfc converter**



