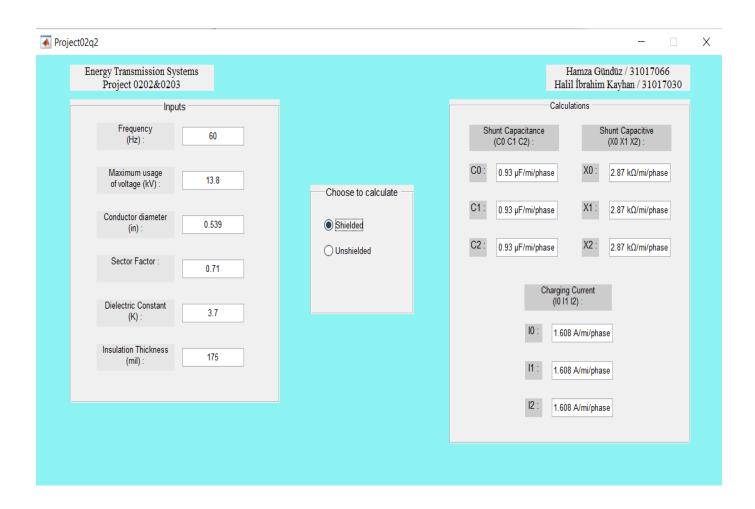
Energy Transmission Systems

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Project 02 Question 01

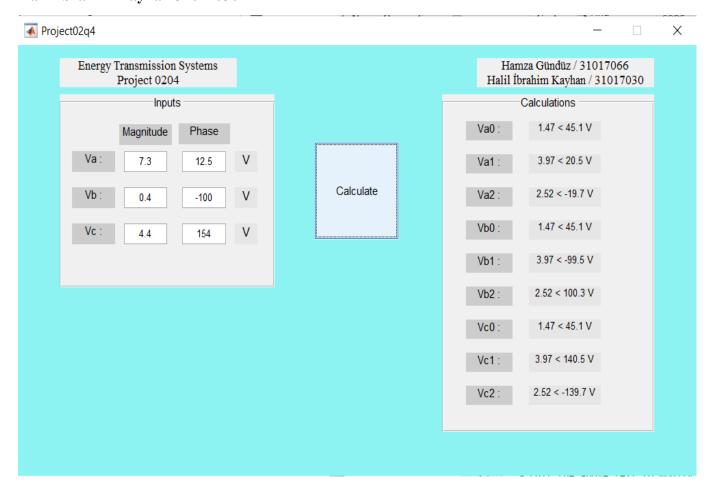
♠ Project02q1		- [X
Energy Transmission Systems Project 0201		Hamza Gündüz / 31017066 Halil İbrahim Kayhan / 3101703	0
Inputs		Results	
Conductor diameter (in): 0.681			
Insulation Thickness (in):		Mutual reactance between conductors and sheath : $0.9245~\Omega/\text{phase}$	
Metal Sheath Thickness (mil):		Sheath resistance of cable : $12.9049~\Omega / \mathrm{phase}$	
Length (mi):	Calculate	Increase in conductor resistance due to sheath currents : 0.0659 Ω/phase	
Conductor ac resistance $(\Omega/\text{mi/phase})$: 0.190			
Frequency (Hz):		Total resistance of conductor including sheath loss : $1.9659~\Omega/\mathrm{phase}$	
Conductor Size (kcmil) : 350		Ratio of sheath loss to conductor loss : 3.47%	
Three Phase Voltage (kV) 35		Total sheath losses of feeder in watts if current in conductor is 400 A : 31626 W	
Degree (°C): 50			



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Project 02 Question 03





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Project 02 Question 05

