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Courses » Computer Aided Power System Analysis

Announcements **Course** Ask a Question Progress FAQ

Unit 3 - Week 2

Register for Certification exam

Course outline

How to access the portal

Week 1

Week 2

- Power flow equations and classification of buses
- Basic Gauss - Seidel Numerical Method
- Gauss - Seidel Load Flow (GSLF)
- GSLF with Multiple Generators
- Example of GSLF

Quiz : Assignment 2

Week 3

Week 4

Week 5

Week 6

Assignment 2

The due date for submitting this assignment has passed.

As per our records you have not submitted this assignment. **Due on 2019-02-13, 23:59 IST.**

1) **Note: For solving this assignment, a computer program for implementing Gauss-Seidel load flow program needs to be developed.**

Consider the bus data and line data of the small 5 bus example system given in lecture 10. In this system, the real power load at bus 4 is changed to 150 MW (instead of 115 MW as given in the example). All other data of this system are same as given in lecture 10. Assume that there is no reactive power limit on any of the generators. Assume α (acceleration factor) = 1 and ϵ (convergence threshold) = $1.0e-12$. Upon computing the power flow program using Gauss-Seidel method, the following quantities are obtained:

1) Magnitude of bus 5 voltage (in p.u) is:

No, the answer is incorrect.

Score: 0

Accepted Answers:
(Type: Range) 0.90,0.95

2 points

2) **Magnitude of bus 4 voltage (in p.u) is:**

No, the answer is incorrect.

Score: 0

Accepted Answers:
(Type: Range) 0.85,0.95

2 points

3) **Magnitude of bus 3 voltage (in p.u) is:**

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Week 10	ce De	4) Angle of bus 4 voltage (in degree) is:		
Week 11		<input type="text"/>	No, the answer is incorrect.	
Week 12			Score: 0	
DOWNLOAD VIDEOS		Accepted Answers:		
		(Type: Range) -13.0,-12.0		
Interaction Session		5) Angle of bus 5 voltage (in degree) is:		2 points
		<input type="text"/>		
		No, the answer is incorrect.		
		Score: 0		
		Accepted Answers:		
		(Type: Range) -7.0,-6.5		
				2 points

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