SYSC 4101
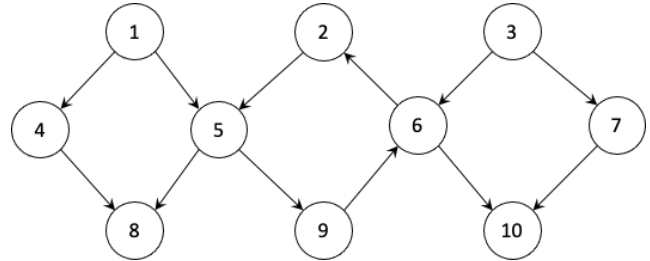
Laboratory 5

Consider the following graph: it has three initial nodes (1, 2, and 3) and two final nodes (8 and 10).

Question 1. (2 pts)
What are the test requirements for the All-Nodes criterion? (You are asked to list the test requirements.)

Question 2. (2 pts)
What are the test requirements for the All-Edges criterion? (You are asked to list the test requirements.)

Question 3. (4 pts)
What are the test requirements for the Prime-Path criterion? (You are asked to list the test requirements.)
Hint: there are 14 of them!

Question 4. (4 pts)
Create a test suite that is adequate for the All-Nodes criterion but is not adequate for the All-Edges criterion. Justify.

Question 5. (4 pts)
Create a test suite that is adequate for the All-Edges criterion but is not adequate for the All-Prime-Paths criterion. Justify.

Question 6. (4 pts)
Complement your All-Edges adequate test suite to create a test suite that is adequate for the All-Prime-Paths criterion. Justify.

Question 7. (4 pts)
What are the round trips in this graph?

Question 8. (4 pts)
Is the All-Prime-Paths adequate test suite you created adequate for the Complete-RoundTrip criterion? For the Simple-RoundTrip criterion? Justify.

Question 9. (2 pts)
What are the test requirements for the All-Edge-Pairs criterion? (You are asked to list the test requirements.)

Question 10. (3 pts)
If your All-Edges adequate test suite is not also All-Edge-Pairs adequate, justify why and complement the test suite to create an All-Edge-Pairs adequate test suite.