hw2_csps_q6_arc_consistency

Question 6: Arc Consistency

4/4 points (ungraded)

Consider the problem of arranging the schedule for an event. There are three time slots: 1, 2, and 3. There are three presenters: A, B, and C. The variables for the CSP will then be A, B, and C, each with domain {1, 2, 3}. The following constraints need to be satisfied:

1. A, B, and C all need to take on different values
2. $A < C$

Enforce consistency for the arc $A \rightarrow C$, and then select which values remain for each variable.

- [x] A: 1
- [x] A: 2
- [ ] A: 3
- [x] B: 1
- [x] B: 2
- [x] B: 3
- [x] C: 1
- [x] C: 2

- [x] C: 3

✔

Submit

✔ Correct (4/4 points)

problem

4/4 points (ungraded)

Starting from the result of the previous step, enforce consistency for the arc $B \rightarrow A$, and then select which values remain for each variable.

- [x] A: 1
- [x] A: 2
- [ ] A: 3
- [x] B: 1
- [x] B: 2
- [x] B: 3
- [x] C: 1
- [x] C: 2
- [x] C: 3

✔

Submit

✔ Correct (4/4 points)

problem

4/4 points (ungraded)

Starting from the result of the previous step, enforce consistency for the arc $C \rightarrow A$, and then select which values remain for each variable.

- [x] A: 1
- [x] A: 2
- [ ] A: 3
- [x] B: 1
- [x] B: 2
- [x] B: 3
- [ ] C: 1
- [x] C: 2
- [x] C: 3

✔

Submit

✔ Correct (4/4 points)