**ACI Assignment 2**

**Question 6 – C-section data Processing for decision making**

Below is given the link for a data set from the UCI ML repository.

Caesarian Section Classification Dataset

<https://archive.ics.uci.edu/ml/datasets/Caesarian+Section+Classification+Dataset>

Download the data set. You are required to do the following:

Question 1: Python

1. Construct a Bayesian Belief Network for the given data.

Use appropriate methods to predict the following:

1. Predict the probability of a patient having the following properties : Age is 22,first delivery with delivery time 2 and with no heart problem or blood pressure and having normal delivery
2. Predict the type of delivery for the lady with the following characteristics: Age is 26, admitted for second delivery with time of delivery 0, having blood pressure and no heart problem.
3. Infer the probability for the data : Age: 36, 4th delivery, with time of delivery 1 and has blood pressure and no heart problem to have normal delivery.

Question 2: Prolog

1. Use Any of the decision tree algorithms to build a decision tree for the given data
2. Create rules from the decision tree.
3. Code the rules into a Prolog Knowledge base
4. Get user data as input and give the type of delivery as output.