**Project 3 – Bayesian Network**

The project is to give probabilities of recovery time of athletes based on observations as follows :-

**Height, Built, Age, Gender and skills.**

**There are in total 15 nodes.**

**The flow : -**

Age, Gender 🡪 Cricket, Baseball, Soccer and Basketball

Skills 🡪 Cricket, Baseball

Built 🡪 Soccer

Height 🡪Basketball

Cricket, Baseball, Basketball, Soccer 🡪 Knee\_injury, shoulder\_injury

Knee\_injury, shoulder\_injury, training\_since, training\_level, body\_type 🡪 recovery\_time

**Recovery\_time** gives the probability of recovering and getting back on the field in

Less than 6 weeks

6 to 12 weeks

12 to 24 weeks

More than 24 weeks

**Test cases ::**

**The probalities of any nodes can be testing by setting the observed variables to some variable.**

**Examples :**

P(cricket = yes| age>20) set age>20 as true.

P( recovery\_time = Weeks\_0\_6| age>20, cricket = yes)

Any combination of observations can be tested.