ProtocolTree ::Create ProtocolTree\_KW(FormulaTree):

A Static method of Protocol Tree class:

1. Creates a new PartyNode(root) with type A(if and)/B(if or), input vector/string with length m\_num\_of\_variables(initialize it with null?) , with m\_num\_of\_children +1 (from FormulaTree)and a pointer to FormulaTree(sub\_formula\_tree) .

(-Implement a routine: FormulaTree FormulaTree::sub\_formula\_tree(LogicalNode) creates a sub FormulaTree from a LogicalNode and its childrens(?))

1. Creates a ProtocolTree with the root.
2. For each Logical Node in FormulaTree:

Add a new ProtocolNode to ProtocolTree with type A(if and)/B(if or), input vector/string with length m\_num\_of\_variables(initialize it with null?) and a pointer to FormulaTree(sub\_formula\_tree) .Note: in this stage, give an index to each inserted node.

1. Return ProtocolTree.

Define enum: Alice & Bob.