The Game of Nim

1. Does there always exist a sequence of moves such that the player making the first move wins?

Yess,4 2 1 (method referred online)

1. Given a Nim position, is there a way to determine whether it is possible to win for any player with perfect play? If not, why? If yes, how?

Yes If both of them play optimally (4 2 1 method)

1. If a sequence of move which guarantees a win does exist for a Nim position, how will you determine the sequence of moves? That is to say, how is the computer coded to play the most optimum way?