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2. Real world problem

A type of problem that we are facing everyday in our life known as Real world problem. These types of problem always change with time and situation so these problems are very complex and their constraints are always varied. Here we are discussing following types of problems that we can solve by applying AI problem solving techniques.

i). Travelling salesman problem (TSP)

This type of problem is also known as touring problem . In this case a salesman or tourist can visit its city only once . The main objective of this problem is to find the shortest distance for tourist or sales person to visit atleast one time in each city or destination. This type of problem resolve by applying spanning tree , from the given graph / map between cities or destination. The spanning tree technique break the cycle which repeat the graph edge or map edge between cities or destinations.

ii).. VLSI Layout problem

In this problem millions of components and connections are positioned on a chip to minimize area, circuit delay increase capacity of capacitance and optimize the layout. This layouting problem in real world is used to reduce the size of electronic devices and make our life easier to interact with technology with portable size . The layout problems can be splitted into three parts .

1. Cell layout
2. Channel routing
3. Protein design

1.Cell layout

This layout is primitive layout in which components of circuit can be grouped into cell. Each cell has a fixed shape and size. The cells placed on the chip without overlapping each other .

2. Channel routing

It is a specific route which find for wires through the gap between the cells .

3. Protein Design

This problem depends upon structural layout in which sequence of amino acids defined as 3D protein having different property which able to cure after finding changes into define structure which associated to disease.

