

Department of Computer Science and Engineering,
College of Engineering, Anna University, Chennai
November 2021 – March 2022
CS6102 – Computational Thinking

Test-I

Sem / Batch : I / N

Date: 04-Feb-2022

Duration: 60 Minutes

Max. Marks: 20

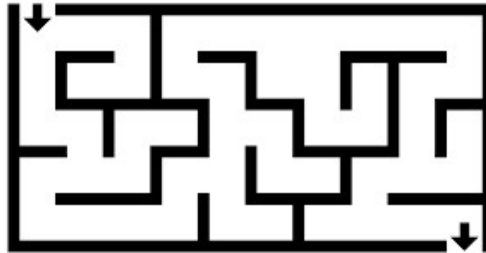
Answer all the Questions

1. Convert the word LISP into the word JAVA in 5 steps or less. You must only change one letter of the word on each step. On every step you should have created a word in the English dictionary. (5)

L I S P

J A V A

2. Write a step-by-step detailed procedure that can be used by the fish to reach its destination. (7)
(Note: the diagram below is only a representative of the problem and is not an exact one)



Imagine there is a fish that is trying to find its way to the destination. It starts from its initial position and proceeds towards its destination. On its way it has a mechanism to forward itself at every step. At every junction (multiple options) It fires a beam in all directions and it chooses the direction from which the beam does not return (no obstacle) and proceeds further. It follows this strategy till it reaches its destination. When it reaches its destination a flash of light appears to indicate the arrival at the destination.

3. Travelling and touring are the popular leisure activities enjoyed by millions of people around the world. Plan your travel itinerary to an international destination and provide your itinerary in a hierarchical structure based on the sample facts listed below. (8)

Note: Facts given below are just for references, inclusion of more facts are appreciated and considered

Facts:

- Budget Planning
- Length of the tour
- Choosing Destination
- Hotel and Logistics planning, etc..