

Puzzle – 19

Q- Rats and Poisonous Milk Bottle Puzzle

You have 4 bottles of milk. One of them is poisonous while the other 3 are non-poisonous. There is a rat which dies exactly after 10 hours of drinking the poisoned bottle. You have a clock that measures time only in hours. Suggest an optimal strategy to identify the poisoned bottle within 24 hours.

My Approach and Solution –

As there are 4 bottles of milk, we feed the rat 1st bottle in the 1st hour, 2nd bottle in the 2nd hour, and 3rd bottle in the 3rd hour.

If the rat dies after 10 hours of start then bottle 1 is poisonous.

If the rat dies after 11 hours of start then bottle 2 is poisonous.

If the rat dies after 12 hours of start then bottle 3 is poisonous.

If the rat does not die in 12 hours, then it means that the bottle 4 is poisonous