DAY 6 SUMMARY

Revision proposition problem:

Today class has begun by revision the proposition problem which has given to yesterday. And continued by revising implication, negation and biconditionals.

Bridge problem:

This bridge problem is the one which has no solution that satisfies all the constraints given for the problem. These types of problems are called Eulerian cycle problem.

Eulerian problems:

It is a type of path in a graph, like the only rule of this problem is we have to cross or visit every edges only once and have to start and end in the same vertex.

In the bridge problem, we can't cross all the bridges once without crossing one of the bridges twice. This is why, the bridge problem has no solution which satisfies the constraints.

Another problem similar to the bridge problem has to us to solve, the pentagon problem, this is also a type of Eulerian problem so this problem also has the same constraints like we have to cross every edges once and have to start and end in the same vertex. It is multiple solution problem, because, this problem can be solved in multiple ways, we can start at any vertex and can go to every edge of the shape and can come to the same vertex.

Classes of problems:

No solution problem: the problem which does have solution but does not satisfy all the given constraints.

Multiple solution problem: these types of problem have multiple number of solutions which can satisfy all the given constraints.

Trial and error problem: these types of problem have many numbers of steps to find the solution of the problem which satisfy the constraints. For example, sudoku is a trial-and-error problem, it has many steps to solve the problem along with the given constraints.

Computing:

Computing means performing a calculation like addition, subtraction, multiplications etc. All the mathematical calculations come under computing.

For example: for us it is easy to compute a result for an addition problem. But for computer it follows a sequence of steps like processing the input, storing it in the memory and producing the output.

Computer conversions:

Computer converts everything into 0s and 1s and it takes this 0s and 1s as electrical signals like for 0s, the signal will be 0v and for 1s, the signal will be 5v.

What i have learned today?

Continued to yesterday, i wrote algorithms for given programs. And i learned some important topics in JavaScript like functions, if and if else conditions, and for loops. I got to know the syntax for all these problems and how to use it and what is the purpose of functions, conditions and loops.

I tried to write code for some basic problems using loop and conditions. I tried to understand the given problem and think of all the possible ways to writs code for those problems.

Struggles faced:

- Today, I struggled with solving the problems and writing code for basic problem.
- I understand the problem clearly, but I don't know how to write conditions and loop for those problem.

Key takeaways:

- I have learned how to understand the given problem.
- I have learned the basic syntax of functions, conditions and loops.
- I have learned how to write code using for loops and conditional statements.
- I have realized that I need to understand and practice solving many problems to properly learn how to use loops in the code.