

BEE BREADING

SHRI VISHNU ENGINEERING COLLEGE FOR WOMEN

MAY 3 2021

DESCRIPTION

Professor B. Heif is conducting experiments with a species of South American bees that he found during an expedition to the Brazilian rain forest. The honey produced by these bees is of superior quality compared to the honey from European and North American honey bees. Unfortunately, the bees do not breed well in captivity. Professor Heif thinks the reason is that the placement of the different maggots (for workers, queens, etc.) within the honeycomb depends on environmental conditions, which are different in his laboratory and the rain forest. As a first step to validate his theory, Professor Heif wants to quantify the difference in maggot placement. For this he measures the distance between the cells of the comb into which the maggots are placed. To this end, the professor has labeled the cells by marking an arbitrary cell as number 1, and then labeling the remaining cells in a clockwise fashion,

UNDERSTANDING THE PROBLEM

1. Create the comb
2. Give the numbering to maggots
3. Find its up right maggots.

The trick is that the comb has 6 edges and there lies the output by keeping the shortest distance included in this way we can solve the problem

For example:

Sample Input ————

19 30

19 and 30 Shortest distance is 19-7-6-5-15-30. Here there are 5 cells between them. So Distance is 5

Sample Output ————

The distance between cells 19 and 30 is 5.

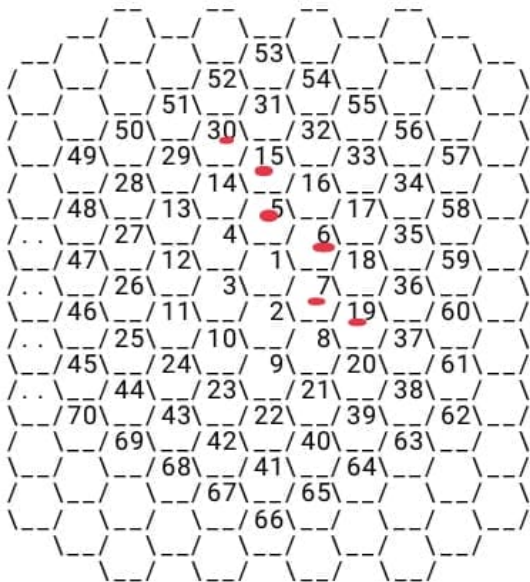


Figure 1: Hub

TASKS DIVISION

1. Find out the logical approach
2. Write an algorithm
3. Write a code
4. Debugging of code
5. Execution with different values and making required changes

EXECUTION OF TASKS

- ▶ 4.1 DAY 1 : We will try to find the logic in different ways and come to conclusion of final logic.
- ▶ 4.2 DAY 2 : We will write the algorithm for the logic we have came to conclusion.
- ▶ 4.3 DAY 3 : We will write the code for above algorithm.
- ▶ 4.4 DAY 4 AND DAY 5 : We will be trying to clear all the bugs in our code

LEARNINGS

- ▶ Breadth first search algorithm
- ▶ Dijkstra algorithm
- ▶ Git Lab
- ▶ LaTeX

TEAM MEMBERS

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