



LOGIC •THINK•CODE
•CONQUER | **LAMP**

OVERVIEW

“Logic Lamp” is a team-based Technical event designed to test logic building, problem-solving skills, collaboration, and coding efficiency.

The event consists of 3 competitive rounds , progressively increasing in difficulty. Each team must consist of 2 participants .



PRIZE OVERVIEW

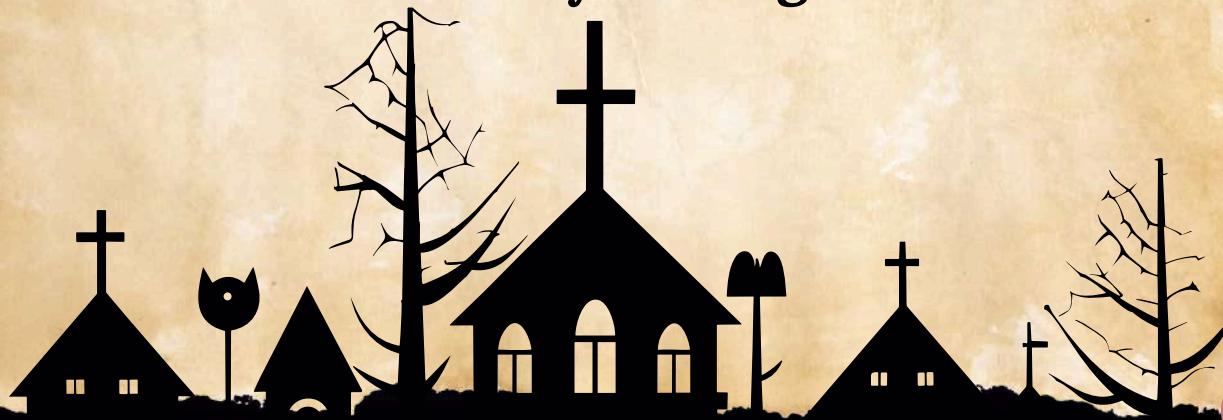
- Winner : ₹3000
- Runner Up : ₹2000
- Special Prize 1 : ₹1000
- Special Prize 2 : ₹1000



ROUND 0:

SCREENING ROUND (ONLINE)

- >>> Date: 22 January 2026**
- >>> Objective:** To give all participants a fair opportunity to showcase their basic programming skills before entering the main rounds.
- >>> Trigger Condition (Dynamic Rule):** This round will be conducted only if the number of registered teams exceeds the maximum accepted limit decided by the organizers.



ROUND 0:

SCREENING ROUND (ONLINE)

>>> Scoring & Shortlisting:

- Teams will be ranked based on total score.
- Only the top teams up to the event capacity will qualify for Round 1 - Syntax Sprint.
- In case of a tie, qualification will be determined by submission time.

>>> Special Note:

If the participant count is within the accepted limit, Round 0 will be skipped and all teams will directly proceed to Round 1.

ROUND 1:

SYNTAX SPRINT

(PEN-AND-PAPER MCQ ROUND)

- >>> Date:** 23 January 2026
- >>> Objective:** Test participants' foundational knowledge of programming concepts, logic, debugging, and output prediction.
- >>> Format:**
 - Pen-and-paper MCQ examination.
 - Questions will include:
 - Output prediction from code snippets.
 - Basic concepts of programming (loops, conditionals, functions, etc.)
 - Debugging & error identification.
 - Logical reasoning .

ROUND 1:

SYNTAX SPRINT

(PEN-AND-PAPER MCQ ROUND)

>>> Rules:

- 1. Time allotted: 30 minutes.**
- 2. Each team must attempt the paper together as a pair.**
- 3. No calculators, mobile phones, or external devices allowed.**
- 4. Each question carries one mark. No negative marking.**

>>> Scoring & Qualification:

- Based on cumulative score.**
- Top 20 teams OR Top 60-70% qualify for Round 2.**





GAMBLE ROUND (OPTIONAL)

>>> Time: 10 mins

>>> Number of Questions: 1

>>> Rules:

- If the question is solved successfully:
 - Extra marks will be added to Round 1 score
 - Hint tokens will be awarded for use in Round 2

- If the question is not solved :
 - Marks will be deducted from the Round 1 score





ROUND 2: **DUO LEVELING (HACKERRANK)**

- >>> Date:** 24 January 2026
- >>> Objective:** Solve problems of increasing difficulty collaboratively in an online coding environment.
- >>> Platform:**
 - Hackerrank
- >>> Format:**
 - Round 2 will consist of 4 sequential levels .
 - Each level will contain exactly ONE problem.
 - Teams must successfully solve the problem in the current level to receive the access link for the next level.



ROUND 2: DUO LEVELING (HACKERRANK)

- Links for the next level will be provided by the organizers only after confirmation of successful completion
- A level is considered completed only when the solution passes all test cases.

>>> Hint Usage System:

- Using a hint does not affect scoring.
- Unused hint tokens carry over to the final level, but expire after Round 2 (cannot be used in CodeBid).

>>> Rules:

1. Time allotted: 90 minutes .
2. Teams can code in C++, C, Python.
3. Only 2 team members are allowed to collaborate.





ROUND 2: DUO LEVELING (HACKERRANK)

- 4. Internet usage outside the platform, use of AI tools, or external code search is strictly prohibited.**
- 5. Plagiarism/duplicate submissions may lead to disqualification.**
- 6. Partial scoring may be applied based on the number of test cases passed.**

>>> Advancement Criteria:

- Teams ranked based on:
 - Number of levels cleared
 - Total Points(in case of partial submission of the code)
 - Completion time

>>> Qualification:

- Top 6 teams qualify for Round 3.

ROUND 3: CODEBID

- >>> Date:** 24 January 2026
- >>> Objective:** To test participants' ability to design logic, manage limited resources, and implement accurate solutions under component-based constraints.
- >>> Platform:** Hackerrank (C++ only)
- >>> Format:**
 - A common set of problem statements will be presented to all qualified teams (7-8 problems will be auctioned one by one).
 - Teams must bid for the right to attempt a problem.



ROUND 3: CODEBID

- The highest bidder wins the problem statement.
- After winning a problem, teams must bid for the required programming components.
- Teams must implement the solution strictly using only the components they have purchased.
- Total duration of the round: 2 hours.

>>> Initial Purse:

- Each team will be provided with a total purse of 1000 points.



ROUND 3: CODEBID

Component Availability and Base Costs (Example):

Component	Base Cost
Loops	100
If/Else Blocks	150
Switch Case	150
Libraries	100
In-Built Function Usage	150



ROUND 3: CODEBID

>>> Notes:

- Component costs may be modified by organizers if required.
- Every team will have 1 loop and 1 if else condition available by default.
- If a team requires additional components, they must bid separately.

>>> Auction Rules:

- Teams must first bid for the problem statement.
- The team with the highest bid earns the right to solve the problem.
- Component bidding will be done using the remaining purse.
- After the auction, if a team wishes to buy a component later, it must pay $1.5 \times$ the highest bid of that component.

ROUND 3: CODEBID

>>> Rules:

- Teams may only use components they have successfully purchased.
- Any attempt to use unowned components will result in penalties.
- Use of AI tools is strictly prohibited.
- Incorrect or incomplete code affects correctness but not penalty computation.

>>> Time Allocation:

- Logic Planning: 15 minutes
- Problem Bidding: Included in round time
- Logic Planning (after bidding): 10 minutes
- Component Bidding: Included in round time
- Coding Phase: Remaining Time

ROUND 3: CODEBID

>>> Penalties:

Additional penalties may be imposed for unpurchased component usage.

>>> Scoring System :

1. Overall Score – Grand Prize

The overall score determines the Grand Prize winner.

Evaluation is based on (priority wise):

- Completion of problem statement**
- No. of penalties**
- Remaining purse**
- Time taken to complete the solution**

The team with the highest overall score will be awarded the Grand Prize.

ROUND 3: CODEBID

2. Runner-Up Prize

The Runner-Up Prize will be awarded to the team that performs second best based on the overall evaluation criteria mentioned above.

3. Special Prizes

Two Special Prizes will be awarded.

These are mystery prizes and will be announced by the organizers after the event.

>>> Tie-Breaker :

If two or more teams have the same score, ranking will be determined by completion time.

