

PREP-A-THON

Introduction:

PREP-A-THON SAGA is a hackathon that focuses on basic interview aspects for the company to hire. This event will contain all the topics needed for preparation of a company. The questions will be as per the most simple and commonly asked questions in interviews, the event team will be responsible to integrate the questions in the gaming hackathon that is PREP-A-THON.

About the event:



Stage 1: Aptitude Enigma

How to Play:

- i. An aptitude question will be assigned to each participant out of 10. The question will not be directly provided to the participant, instead the participant will have to solve 5 riddles.
- ii. After solving these riddles the participant will gain part of hints to solve final aptitude question.
- iii. The participants must solve all the riddles and acquire all the hints to obtain the aptitude question.
- iv. After solving all riddles the person to solve the aptitude question before everyone else is qualified to move to the next round.
- v. From 10 participants only 8 move forward

Example:

1) A train running at the speed of 60 km/hr crosses a pole in 9 seconds. What is the length of the train?

- a) 120 metres
- b) 180 metres
- c) 324 metres
- d) 150 metres

- The above question will be given to the participant after they solve all the below riddles.
 - i) $81 \times 9 = 801$. What must you do to make this equation true?
 - .
 - .
 - Etc
- After solving each riddle the participant will be given a hint like
 - i) you need to know what formula is (speed \times time).
 - .
 - .
 - Etc
- After solving all the riddles the participant must solve the aptitude question in time.



Stage 2: Logical Cascade

How to play:

1. Every participant is given a series of logical questions. One has to solve all the logical questions before everyone else.
2. There will be 4 boxes of different colors namely 'a', 'b', 'c', 'd'.
3. The participant will have to solve the logical question before everyone, the answer of the logical question will be shown in the form of a pyramid puzzle placed in front of the participant.
4. After building the puzzle the participant has to move to the colored boxes of their respective answer.
5. If the answer of the question the participant is given is option A then he/she has to stand in front of that box. The boxes will have 2 participants to accommodate. At total 4 boxes and 8 places.
6. After every participant out of 8 stand in the box, 2 participants will have to stand outside the box which they feel is their answer.
7. After all the participants choose their boxes, chits will be removed from a random draw and the name of the person that comes up in the draw is checked for his/her answer.
8. If the answer is right the participant moves to the next round, otherwise he/her is eliminated.

9. Now the participant coming at 9th and 10th places have a chance after elimination of one person to choose the eliminated persons box or remain outside the box they feel is the right box.

Example:

1) Tanya is older than Eric. Cliff is older than Tanya. Eric is older than Cliff. If the first two statements are true, the third statement is

- a) True
- b) False
- c) uncertain
- d) none of these



Stage 3: Bingo Trivia

How to play:

- i. The participants will be provided a question paper with a bingo card.
- ii. These bingo cards will be having the answers to the questions that are to be asked.
- iii. Each bingo card will be different for everyone.
- iv. Any participant that gets bingo line, passes the round.
- v. Each bingo card will be inspected with question and the answers are marked right or not. The participant must right which questions answer is the block in bingo card there itself in the block.
- vi. From 10 participants only 8 move forward.

Example:

1) The following are components of a database except _____ .

- a) user data
- b) metadata
- c) reports
- d) indexes

User data	indexes	Meta data
reports	metadata	User data

User data	reports	indexes
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Stage 4: Techsolve Crossword

How to play:

- i. The participant will be provided with a question paper which consist of 10 technical questions.
- ii. With the technical question there will be a crossword provided below the question.
- iii. The participant has to fill the crossword with the answers of above questions.
- iv. This should be solved before everyone else and event will be timed.
- v. From 10 participants only 8 move forward.

Example:

1) How long is an IPv6 address?

- a) 32 bits
- b) 128 bytes
- c) 64 bits
- d) 128 bits

		3			
		2			
6	4	b	i	t	s
		i			
		t			
		s			



Stage 5: Debug Paradox

How to Play:

- i. Every participant will be given a code with many mistakes.
- ii. They have to fill the correct code in the main code.
- iii. The participants will be given 2 options for each blank space, they have to solve a puzzle and get the answer to use that answer in the blank space.
- iv. Event will be timed.
- v. From 10 participants only 5 move forward.

Example:

```
def countRecur(coins, n, sum):  
    if sum == 0:  
        return 1  
    if sum < 0 or n == 0:  
        return 0  
    return countRecur(coins, n, sum - coins[n - 1]) + \  
        countRecur(coins, n - 1, sum)  
  
def count(coins, sum):  
    return countRecur(coins, len(coins), sum)  
  
if __name__ == "__main__":  
    coins = [1, 2, 3]  
    sum = 5  
    print(count(coins, sum))
```

- There will be code given to each participants, the codes will contain some errors and missing parts or incorrect code.
- The participant must solve the code in time.



Stage 6: Codeflux

How to play

- Every participant will be given a coding question
- They have to solve the question in time limit
- We get final winner.

Example:

Given an array **arr[]** of n integers and a **target** value, the task is to find whether there is a pair of elements in the array whose sum is equal to **target**. This problem is a variation of 2 Sum problem.

Examples:

Input: `arr[] = [0, -1, 2, -3, 1], target = -2`

Output: `true`

Explanation: There is a pair (1, -3) with the sum equal to given target, $1 + (-3) = -2$.

Input: `arr[] = [1, -2, 1, 0, 5], target = 0`

Output: `false`

Explanation: There is no pair with sum equals to given target.

Some Bonus Rounds:

- A bonus round will be asked before every stage round.
- The bonus round consist of questions on the sponsors, College (GSMCOE) related question and Event (technobash) related questions.
- The participants to answer these questions will get some benefits in the game.
- Eg; if a participant gets a answer right they will be given the answer of first part of the question.
- This give an advantage over other participants.