



WHAT ARE HACKATHONS ?

The Power and Significance of Hackathons

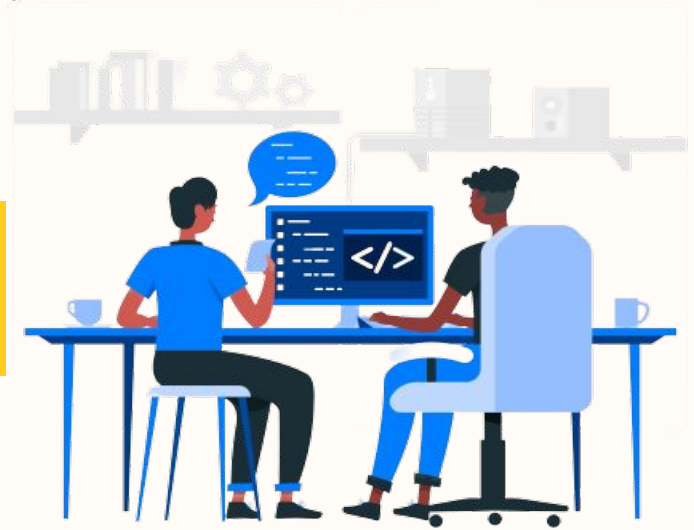


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INTRODUCTION

A hackathon, also known as a codefest, is a social coding event that brings computer programmers and other interested people together to improve upon or build a new software program.

The word hackathon is a combination of "**hack**" and "**marathon**". So, essentially it's a marathon for hackers.



WHAT ARE HACKATHONS ?

Hackathon brings together individuals with diverse backgrounds and skill sets to collaborate intensively on a specific project or challenge, usually within a **limited timeframe**, often ranging from a few hours to a few days.

The aim is to brainstorm, design, and create innovative solutions to a predefined problem, often related to technology, but not limited to it.



BENEFITS OF HACKATHONS

Hackathons play a pivotal role in today's innovation ecosystem for several reasons:

- Rapid Problem Solving
- Learning and Skill Development
- Networking
- Innovation and Ideation
- Resume Boost
- Cross-Disciplinary Collaboration



REQUIREMENTS FOR A HACKATHON

- Thorough Research
- Communication Skills
- Time Management
- Enthusiastic Team
- Plan of action
- Technical Skills



HACKATHON DOMAINS

- Web Development
- Mobile App Development
- Artificial Intelligence and Machine Learning
- Data Science
- Internet of Things (IoT)
- Virtual Reality (VR) and Augmented Reality (AR)
- Blockchain



I. MILK MAN AND HIS BOTTLES

A Milkman serves milk in packaged bottles of varied sizes. The possible size of the bottles are {1, 5, 7 and 10} litres.

He wants to supply the desired quantity using as fewer bottles as possible irrespective of the size.

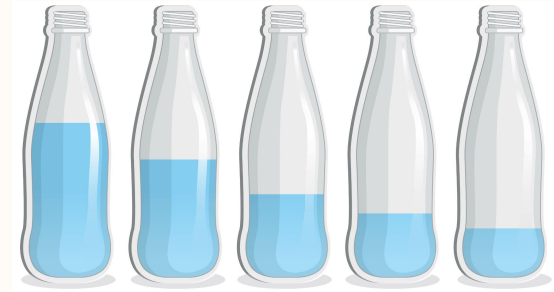
Your objective is to help him find the minimum number of bottles required to supply the given demand for milk.



I. SOLUTION

To solve this problem efficiently and find the minimum number of bottles required to supply the given demand for milk we can use a

Greedy Algorithm approach.



The idea is to always try to use the largest available bottle size first and then move on to smaller sizes if needed.

- > Sort the available bottle sizes in descending order: {10, 7, 5, 1}
- > Quotient -> No of bottles
- > Remainder-> Amount of milk left to be fulfilled

II. SOFTWARE TOOL TO AID SEARCH AND RESCUE OF AN AIRCRAFT

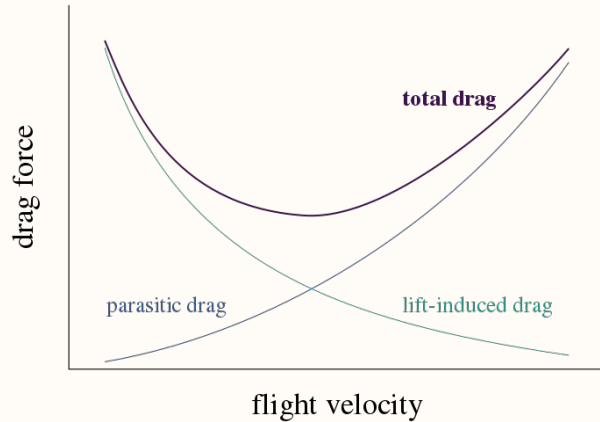
Description: If the contact with an aircraft is lost it leads to death of everyone in it but in such rare cases if we can find the expected location of crash accurately there can be chances of rescuing people.

Develop a software which can help in the case of missing aircraft .It should be able to calculate and plot the accurate area to search for the aircraft by using the last known position of the aircraft. So that it can reduce the search time.



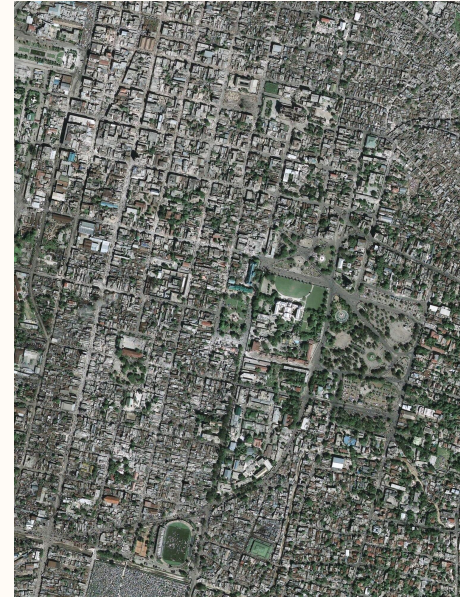
RESOURCES THAT MIGHT HELP

- Last known location
- Velocity of aircraft
- Direction of aircraft



DIRECTION

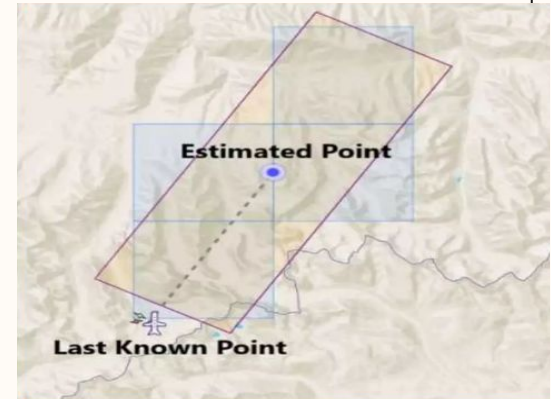
SATELLITE VIEW



MAKE ANALYSIS AND PREPARE ABSTRACT

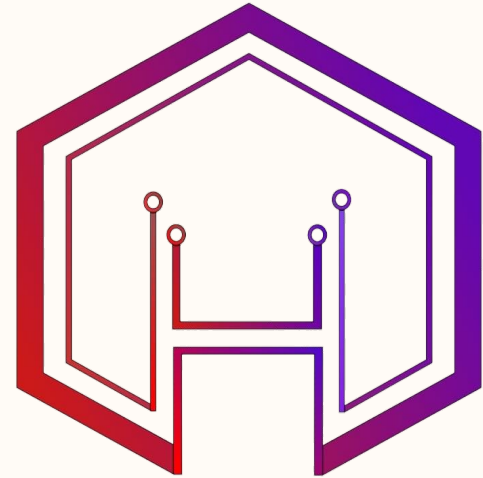
Index	Search Pattern	Rescue Team	Path Length	Search Time (hours)	Field of View (km)	Speed (km/hr)
0	creepy_line	helicopterA	24.9668	0.0499	1.0000	500.0000
1	expanded_square	helicopterB	48.6000	0.1620	0.6000	300.0000
2	expanded_square	helicopterB	48.6000	0.1620	0.6000	300.0000
3	creepy_line	drone	108.1740	0.7727	0.3000	140.0000
4	expanded_square	helicopterB	48.6000	0.1620	0.6000	300.0000

- Description
- Research Method
- Design
- Major Findings
- Conclusion



WHAT DOES ANURAG HACKORIO DO ?

Our club offers a wide range of opportunities for our members to get involved in hackathons, mentorship programs, events, etc., and to enhance their skills, expand their network, and be part of an exhilarating hackathon culture.



HACKORIO

THINK | HACK | INNOVATE

WHY SHOULD YOU FOLLOW US ?

- Genuine Hackathons ✓
- Engage in our hands-on hackathons for a dynamic learning experience.
- Receive accurate timely notifications about upcoming and ongoing hackathons for the Right Opportunities 🕒
- Embrace continuous learning to stay updated with real-world Challenges.
- Personal growth through enhancing communication, speaking ,leadership , teamwork, and group discussion abilities. 🚀
- Unlock Internship Opportunities and Exciting Rewards.

HACKATHONS WE ENDORSED !



TOP LEVEL HACKATHONS

-HACKORIO

- **AMAZON ML CHALLENGE**
- **FLIPKART GRID**
- **MSME HACKATHON**
- **MAJOR LEAGUE HACKING EVENTS**
- **MICROSOFT GLOBAL HACKATHON**
- **MICROSOFT VIRTUAL HACKATHON**
- **HACKMIT**
- **WEB3 HACKFEST**
- **GIRL HACKATHON**
- **HACKERRAMP-MYNTRA**
- **SMART INDIA HACKATHON**
- **GOOGLE FOR DEVELOPERS**

AMAZON ML CHALLENGE



FLIPKART GRID



MSME HACKATHON



MAJOR LEAGUE HACKING EVENTS



MICROSOFT GLOBAL HACKATHON



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GOOGLE FOR DEVELOPERS



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HACKER-RAMP MYNTRA



SMART INDIA HACKATHON



THANKYOU

HACKORIO