S.No	Problem Statement ID	Problem Statement Name	Domain
20	CT-OSINT - 02	Drone Technology	OSINT / Threat Intelligence

Description:

Drone technology is revolutionizing the way Open-Source Intelligence (OSINT) is gathered. Drones are equipped with cameras, sensors, and other advanced tools that allow them to capture high-quality images, videos, and real-time data from hard-to-reach areas.

In OSINT applications, drones can be used to monitor public events, map terrains, conduct environmental surveillance, and track movements over large areas. Their agility and ability to collect data from diverse locations make them invaluable tools for intelligence gathering.

Objectives:

1. **Enhanced Data Collection:**
   - Use drones to capture aerial views, monitor areas of interest, and gather high-resolution images and videos for analysis.
2. **Real-Time Surveillance:**
   - Enable live-streaming capabilities for immediate assessment of situations like public gatherings or natural disasters.
3. **Terrain Mapping and Analysis:**
   - Create detailed maps of terrains, infrastructure, or movement patterns in specific regions.
4. **Non-Intrusive Intelligence Gathering:**
   - Use drones for covert data collection without disturbing the area under observation.
5. **Support Investigations:**
   - Aid law enforcement and intelligence agencies by providing visual evidence and situational awareness.

Expectations:

For Hackathon Participants:

1. **Build a Drone OSINT Prototype:**
   ○ Design a system that uses drones to capture, process, and analyze data for intelligence purposes.

2. **Integrate with OSINT Tools:**
   ○ Ensure compatibility with existing OSINT frameworks for seamless data analysis and visualization.

3. **Focus on Automation:**
   ○ Develop features like automated flight paths, object detection, and real-time data streaming.

4. **User-Friendly Interface:**
   ○ Create an intuitive dashboard for controlling drones and viewing collected data.

5. **Privacy and Legal Compliance:**
   ○ Adhere to privacy laws and ethical guidelines for drone-based intelligence gathering.

For OSINT Applications (Law Enforcement/Investigators):

1. **Improved Data Accuracy:**
   ○ Capture precise and reliable data for investigations or intelligence operations.

2. **Extended Reach:**
   ○ Monitor areas that are difficult to access by traditional means, like disaster zones or remote terrains.

3. **Real-Time Monitoring:**
   ○ Observe ongoing events or situations and respond promptly to emerging threats.

4. **Versatility:**
   ○ Use drones for various applications, including traffic monitoring, border surveillance, and crime scene documentation.

5. **Enhanced Situational Awareness:**
   ○ Provide investigators with a bird's-eye view of areas of interest.

Expected Results:

1. **Faster Intelligence Gathering:**
   - Drones can cover large areas quickly, reducing the time needed to gather data.
2. **Accurate Mapping:**
   - Generate precise 3D maps and models of terrains or areas under investigation.
3. **Enhanced Investigations:**
   - Provide visual evidence and actionable insights for law enforcement or intelligence teams.
4. **Cost Efficiency:**
   - Reduce the need for expensive helicopter operations or ground teams for surveillance.
5. **Safer Operations:**
   - Conduct surveillance in potentially dangerous areas without risking human lives.