

Spytective

Tagline: Investigate, Interrogate, Infiltrate.

Theme: Spytective Language is a fusion between **Detective deduction** and **Spy missions**.

Every program is a top-secret investigation; each line of code represents a lead, interrogation, or covert operation.

The syntax follows a C-like structure but replaces standard keywords with agent-style and detective-style vocabulary

Keyword Mapping

Concept	Keyword	Analogy	Example
Program start	crime_scene()	The main operation (entry point)	motive <code>crime_scene()</code> {...}
Function definition	motive	Mission or investigation function	<code>motive</code> <code>decryptCode()</code> {...}
Variable declaration	fine	Data declaration	<code>fine</code> <code>clue= 7 ->></code>
Input	trigger	Get info from user	<code>trigger</code> <code>agentName ->></code>
Output	report	Display info/result for user	<code>report</code> "Mission complete." ->>
If	investigate	Analyze or verify condition	<code>investigate</code> (<code>clue > 7</code>) {...}
Else	fallback	Alternative scenario	<code>fallback</code> { ... }
While	resist	Loop until condition	<code>resist</code> (<code>clue != 0</code>) {...}
Return	expose	Return data or conclusion	<code>expose</code> <code>clue ->></code>
Comment	->>	Confidential notes	->> Top Secret

Data Types

Type	Meaning	Example
evidence	String	evidence criminal = 'Bond' ->>
fine	Integer	fine bondAge = 27 ->>
briber	Float	briber bondbalance = 600k ->>
intent	Boolean	intent missionReady = truth ->>
truth	True / 1	intent missionReady = truth ->>
alibi	False / 0	intent missionReady = alibi ->>

Syntax Examples

1.Hello World

```
motive crime_scene() {  
  report "Welcome, Agent. Investigation initialized." ->>  
  expose 0 ->>  
}
```

2.Variables & Input

```
motive crime_scene() {  
  evidence agentName ->>  
  fine agentCode ->>  
  
  report "Enter your agent name: " ->>  
  trigger agentName ->>  
  
  report "Enter your secret code: " ->>  
  trigger agentCode ->>  
  
  report "Agent " + agentName + " verified under code " + agentCode + "." ->>  
}
```

3. Investigate (Condition)

```
motive crime_scene() {  
  fine clue = 9 ->>  
  
  investigate (clue > 7) {  
    report "Prime suspect detected!" ->>  
  }  
  fallback {  
    report "No leads found. Keep investigating." ->>  
  }  
}
```

4. Function Example (Motive)

```
motive decryptCode(fine key) {  
  report "Decrypting secret code..." ->>  
  expose key * 2 ->>  
}  
  
motive crime_scene() {  
  fine code = 21 ->>  
  fine result = decryptCode(code) ->>  
  
  investigate (result > 30) {  
    report "Mission successful. Code cracked!" ->>  
  }  
  fallback {  
    report "Mission failed. Encryption remains." ->>  
  }  
}
```

5.While loop (resistance Model)

```
motive crime_scene() {  
  fine evidenceCount = 0 ->>  
  
  resist (evidenceCount < 3) {  
    report "Collecting evidence piece #" + evidenceCount ->>  
    evidenceCount = evidenceCount + 1 ->>  
  }  
  
  report "All evidence gathered." ->>  
}
```

6.Full Program Example

```
->> Case File #007: Deep Cover Investigation  
  
motive analyzeEvidence(fine pieces) {  
  report "Analyzing " + pieces + " pieces of evidence..." ->>  
  
  resist (pieces > 0) {  
    report "Processing evidence #" + pieces ->>  
    pieces = pieces - 1 ->>  
  }  
  
  expose 1 ->>  
}  
  
motive crime_scene() {  
  evidence agent = "Evelyn" ->>  
  fine totalClues = 3 ->>  
  
  report "Agent " + agent + " is on the case." ->>  
  
  fine result = analyzeEvidence(totalClues) ->>  
  
  investigate (result == truth) {  
    report "Case closed successfully!" ->>  
  }  
  fallback {  
    report "Case unresolved. Continue investigation." ->>  
  }  
}
```

Language Concept Summary

- Spyective merges the thrill of spy operations with the logic of detective investigations.
- It's a story-driven programming language that turns logical structure into an undercover mission.

Core Design Goals

1. Make logic statements sound like mission steps and investigations.
2. Keep syntax intuitive for C/C++/Java learners.
3. Add narrative flavor to problem-solving and algorithms.