**✅ System Requirements**

* **Operating System**: Windows / Linux / macOS
* **Processor**: Dual Core or higher
* **RAM**: Minimum 4 GB
* **Storage**: 100 MB free space
* **Python Version**: 3.7 or above
* **Image Format**: PNG / BMP (lossless)

**📚 Libraries Required**

| **Library** | **Purpose** |
| --- | --- |
| Pillow (PIL) | Image processing and pixel handling |
| PyCryptodome | AES encryption and decryption |
| base64 | Encoding binary data to embed safely |
| hashlib | SHA-256 password to key conversion |
| tkinter (opt) | GUI interface (if implemented) |