Build a Simple URL Shortener in Python (Dictionary + Hashing Based)

**Summary**

I want a basic URL shortener program - similar in concept to services like Bit.ly, but simplified for learning purposes. The program should:  
  
1. Shorten URLs  
- Take a long URL as input  
- Generate a unique short code  
- Store the mapping between the short code and the original URL in memory (use a dictionary)  
  
2. Retrieve Original URLs  
- When given a short code, the program should return the original long URL  
  
3. User Interaction  
- Provide a simple command-line interface (CLI) where the user can:  
shorten (long\_url) - returns the short code  
look up (short\_code) - returns the original long URL  
list - display all stored mappings  
exit - quits the program  
  
4. Implementation Details  
- Use a hash-based approach or random string generator to create the 6-character short codes  
- Ensure short codes are unique (no collisions)  
- The mapping sonly need to persist during program execution (no database required)