CNF_Example.cpp output:

```
hyuse@Hyuse:~/Desktop/Automata/Automata Simulations$ ./ChomskyN
--- CNF Simulator with CYK Parser ---
Demonstrating a Hash-Map based implementation for efficiency.
Grammar Rules:
  S -> AB
  S -> AC
  C -> SB
  A -> a
  B -> b
  [OK] Valid CNF.

--- Testing Strings ---
String "ab": ACCEPTED
String "aabb": ACCEPTED
String "aaabbb": ACCEPTED
String "ba": REJECTED
String "aabbb": REJECTED
String "aaabb": REJECTED

[Interactive Mode]
Enter a string to test (or 'exit' to quit): aaBB
Result: REJECTED
Enter next string: AABB
Result: REJECTED
Enter next string: aabb
Result: ACCEPTED
Enter next string: aaabbb
Result: ACCEPTED
Enter next string:


""
Result: REJECTED
Enter next string: exit
hyuse@Hyuse:~/Desktop/Automata/Automata Simulations$ []
```