## Ejemplos de ejecución

## 1. Ejecutando:

```
cargo run --release -- gramatica2.txt 'ccc'
```

```
ae@march ~/s/l/fuerza (main)> cargo run --release -- gramatica2.txt
    Finished release [optimized] target(s) in 0.00s
     Running `target/release/fuerza gramatica2.txt ccc`
INFO:: Leyendo gramatica de la ruta "gramatica2.txt"
INFO:: Gramatica con representacion Grammar { nt_sorted: [0, 1, 2], non_termina
l: ["E", "S", "B"], number_rules: [3, 3, 5], starting_ptr: [0, 3, 6], rhs: ["aE", "bE", "cS", "eS", "bB", "cB", "cE", "cE", "g", "h"] }
INFO:: Evaluando "ccc#"
INFO:: Grammar {
    E \rightarrow aE|bE|cS
    S \rightarrow eS[bB]cB
    B \rightarrow bE|cE|c|g|h
(Q, 1, ε, E#)
              ⊢ (Q, 1, {E1}, aE#)
  (Caso 1 )
  (Caso 4)
              \vdash (B, 1, {E1}, aE#)
  (Caso 6a)
              ⊢ (Q, 1, {E2}, bE#)
  (Caso 4 )
              ⊢ (B, 1, {E2}, bE#)
              ⊢ (Q, 1, {E3}, cS#)
  (Caso 6a)
  (Caso 2 )
              \vdash (Q, 2, {E3}c, S#)
  (Caso 1 )
              \vdash (Q, 2, {E3}c{S1}, eS#)
  (Caso 4 )
              \vdash (B, 2, {E3}c{S1}, eS#)
              ⊢ (Q, 2, {E3}c{S2}, bB#)
⊢ (B, 2, {E3}c{S2}, bB#)
  (Caso 6a)
  (Caso 4 )
  (Caso 6a)
              \vdash (Q, 2, {E3}c{S3}, cB#)
  (Caso 2)
              \vdash (Q, 3, {E3}c{S3}c, B#)
  (Caso 1 )
              \vdash (Q, 3, {E3}c{S3}c{B1}, bE#)
              \vdash (B, 3, {E3}c{S3}c{B1}, bE#)
  (Caso 4)
  (Caso 6a)
              \vdash (Q, 3, {E3}c{S3}c{B2}, cE#)
  (Caso 2 )
              \vdash (Q, 4, {E3}c{S3}c{B2}c, E#)
              \vdash (Q, 4, {E3}c{S3}c{B2}c{E1}, aE#)
  (Caso 1 )
  (Caso 4)
              \vdash (B, 4, {E3}c{S3}c{B2}c{E1}, aE#)
              ⊢ (Q, 4, {E3}c{S3}c{B2}c{E2}, bE#)
  (Caso 6a)
  (Caso 4 )
              \vdash (B, 4, {E3}c{S3}c{B2}c{E2}, bE#)
  (Caso 6a)
              \vdash (Q, 4, {E3}c{S3}c{B2}c{E3}, cS#)
  (Caso 4 )
              \vdash (B, 4, {E3}c{S3}c{B2}c{E3}, cS#)
  (Caso 6c)
              ⊢ (B, 4, {E3}c{S3}c{B2}c, E#)
             ⊢ (B, 3, {E3}c{S3}c{B2}, cE#)
  (Caso 5 )
  (Caso 6a) \vdash (Q, 3, {E3}c{S3}c{B3}, c#)
               \vdash (Q, 4, {E3}c{S3}c{B3}c, #)
  (Caso 2)
              \vdash (T, 4, {E3}c{S3}c{B3}c, \epsilon)
  (Caso 3 )
La gramatica acepto la entrada "ccc#"
```

## 2. Ejecutando

cargo run --release -- gramatica.txt 'b+b'

```
ae@march ~/s/l/fuerza (main)> cargo run --release -- gramatica.txt 'b+b'
    Finished release [optimized] target(s) in 0.00s
    Running `target/release/fuerza gramatica.txt b+b`
INFO:: Leyendo gramatica de la ruta "gramatica.txt"
INFO:: Gramatica con representacion Grammar { nt_sorted: [2, 4, 0, 1, 3, 5], no
starting_ptr: [0, 1, 2, 4, 5, 7], rhs: ["E", "TE'", "+TE'", "", "FT'", "*FT'",
"", "b", "(E)"] }
INFO:: Evaluando "b+b#"
INFO:: Grammar {
    S \rightarrow E
    E \rightarrow TE'
   E' \rightarrow +TE' | \epsilon
    T \rightarrow FT'
   T' \rightarrow *FT'|\epsilon
    F \rightarrow b|(E)
(Q, 1, ε, S#)
  (Caso 1 ) ⊢ (Q, 1, {S1}, E#)
  (Caso 1 ) ⊢ (Q, 1, {S1}{E1}, TE'#)
  (Caso 1) \vdash (Q, 1, {S1}{E1}{T1}, FT'E'#)
  (Caso 1) \vdash (Q, 1, {S1}{E1}{T1}{F1}, bT'E'#)
  (Caso 2 ) \vdash (Q, 2, {S1}{E1}{T1}{F1}b, T'E'#)
  (Caso 1 ) \vdash (Q, 2, {S1}{E1}{T1}{F1}b{T'1}, *FT'E'#)
  (Caso 4 ) ⊢ (B, 2, {S1}{E1}{T1}{F1}b{T'1}, *FT'E'#)
  (Caso 6a) \vdash (Q, 2, {S1}{E1}{T1}{F1}b{T'2}, E'#)
  (Caso 1) \vdash (Q, 2, {S1}{E1}{T1}{F1}b{T'2}{E'1}, +TE'#)
  (Caso 2 ) \vdash (Q, 3, {S1}{E1}{T1}{F1}b{T'2}{E'1}+, TE'#)
  (Caso 1 )
             \vdash (Q, 3, {S1}{E1}{T1}{F1}b{T'2}{E'1}+{T1}, FT'E'#)
  (Caso 1 ) \vdash (Q, 3, {S1}{E1}{T1}{F1}b{T'2}{E'1}+{T1}{F1}, bT'E'#)
  (Caso 2) \vdash (Q, 4, {S1}{E1}{T1}{F1}b{T'2}{E'1}+{T1}{F1}b, T'E'#)
  (Caso 1) \vdash (Q, 4, {S1}{E1}{T1}{F1}b{T'2}{E'1}+{T1}{F1}b{T'1}, *FT'E'#)
  (Caso 4 ) \vdash (B, 4, {S1}{E1}{T1}{F1}b{T'2}{E'1}+{T1}{F1}b{T'1}, *FT'E'#)
  (Caso 6a) ⊢ (Q, 4, {S1}{E1}{T1}{F1}b{T'2}{E'1}+{T1}{F1}b{T'2}, E'#)
  (Caso 1 ) \vdash (Q, 4, {S1}{E1}{T1}{F1}b{T'2}{E'1}+{T1}{F1}b{T'2}{E'1}, +TE'#)
  (Caso 4) \vdash (B, 4, {S1}{E1}{T1}{F1}b{T'2}{E'1}+{T1}{F1}b{T'2}{E'1}, +TE'#)
  (Caso 6a) \vdash (Q, 4, {S1}{E1}{T1}{F1}b{T'2}{E'1}+{T1}{F1}b{T'2}{E'2}, #)
  (Caso 3 ) \vdash (T, 4, {S1}{E1}{T1}{F1}b{T'2}{E'1}+{T1}{F1}b{T'2}{E'2}, \epsilon)
La gramatica acepto la entrada "b+b#"
```