Github link:

→https://github.com/Badetto/FLCD_Lab2 (In the folder “Lab_Teams”)

Parser:

Description: The first step into creating a Parser algorithm with the parsing method LL(1) is creating the methods: FIRST and FOLLOW.

→**FIRST(symbol: string):HashSet<string>:** It calculates the FIRST set for a given symbol in a context-free grammar, which includes all possible terminals that can appear at the start of strings derived from that symbol.

```
Production Rules of Grammar
S -> ACB | Cbb | Ba
A -> da | BC
B -> g | ϵ
C -> h | ϵ

FIRST sets
FIRST(S) = FIRST(ACB) U FIRST(Cbb) U FIRST(Ba)
         = { d, g, h, b, a, ϵ}
FIRST(A) = { d } U FIRST(BC)
         = { d, g, h, ϵ }
FIRST(B) = { g , ϵ }
FIRST(C) = { h , ϵ }
```

→**FOLLOW(nonTerminal: string, inProgress:HashSet<string> | null):HashSet<string>:** It computes the FOLLOW set for a given non-terminal in a context-free grammar, which includes all terminals that can appear immediately

after the non-terminal in any derivation from the start symbol.