|  |  |  |
| --- | --- | --- |
|  | First | Follow |
| S -> ACB |Cbb |Ba | {d,g,h, Є,b,a} | {$} |
| A -> da| BC | {d,g,h, Є} | {h,g,$} |
| B-> g|Є | {g, Є} | {$,a,h,g} |
| C-> h| Є | {h, Є} | {g,$,b,h} |

Parse Table

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Non-Terminals | d | g | h | b | a | $ |
| S | S -> ACB | S -> ACB | S -> ACB | s-> Cbb | S->Ba | S -> ACB |
| A | A -> da | A -> BC | A -> BC |  |  | A -> BC |
| B |  | B-> g  B-> Є | B-> Є |  | B-> Є | B-> Є |
| C |  | C-> Є | C-> h  C-> Є | C-> Є |  | C-> Є |

First & Follow

|  |  |  |
| --- | --- | --- |
|  | First | Follow |
| E → T X | { int, ( } | { $,) } |
| X → + E | ε | {+, ε } | { $,) } |
| T → int Y | ( E ) | {int, (} | {+,$,)} |
| Y → \* T | ε | {\*, ε} | {+,$,)} |

Parse Table

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Non-T | int | ( | ) | + | \* | $ |
| **E** | E → T X | E → T X |  |  |  |  |
| **X** |  |  | X → ε | X → + E |  | X → ε |
| **T** | T → int Y | T → ( E ) |  |  |  |  |
| **Y** |  |  | Y → ε | Y → ε | Y → \* T | Y → ε |
|  |  |  |  |  |  |  |

|  |  |  |
| --- | --- | --- |
|  | First | Follow |
| C → P F class id X Y | {public, final, class} | {$} |
| P → public | ε | {public, ε} | {final, class} |
| F → final | ε | {final, ε} | {class} |
| X → extends id | ε | {extends, ε} | {implements,$} |
| Y → implements I | ε | {implements, ε} | {$} |
| I → id J | { id } | {$} |
| J → , I | ε | {, **,** ε} | {$} |

Parse Table

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **public** | **final** | **class** | **extends** | **implements** | **id** | **,** | **$** |
| **C** | C → P F class id X Y | C → P F class id X Y | C → P F class id X Y |  |  |  |  |  |
| **P** | P → public | P →ε | P →ε |  |  |  |  |  |
| **F** |  | F → final | F →ε |  |  |  |  |  |
| **X** |  |  |  | X → extends id | X →ε |  |  | X →ε |
| **Y** |  |  |  |  | Y → implements I |  |  | Y →ε |
| **I** |  |  |  |  |  | I → id J |  |  |
| **J** |  |  |  |  |  |  | J → , I | J →ε |