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CSCI 451 HW1

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| Production | Semantic Rules |
| expr -> expr1 + term | expr.t := ‘+’|| expr1 || term.t |
| expr -> expr1 - term | expr.t := ‘-’|| expr1|| term.t |
| expr-> term | expr.t := term.t |
| term->0 | term.t := ‘0’ |
| term->1 | term.t := ’1’ |
| term->2 | term.t := ‘2’ |
| term->3 | term.t := ‘3’ |
| term->4 | term.t := ‘4’ |
| term->5 | term.t := ‘5’ |
| term->6 | term.t := ‘6’ |
| term->7 | term.t := ‘7’ |
| term->8 | term.t := ‘8’ |
| term->9 | term.t := ’9’ |

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| --- | --- |
| Production | Translation Scheme |
| expr -> expr1 + term | expr -> {print(‘+’)} expr1 + term |
| expr -> expr1 - term | expr -> {print(‘-’)} expr1 + term |
| expr-> term | expr-> term |
| term->0 | term->0 {print(‘0’)} |
| term->1 | term->1 {print(‘1’)} |
| term->2 | term->2 {print(‘2’)} |
| term->3 | term->3 {print(‘3’)} |
| term->4 | term->4 {print(‘4’)} |
| term->5 | term->5 {print(‘5’)} |
| term->6 | term->6 {print(‘6’)} |
| term->7 | term->7 {print(‘7’)} |
| term->8 | term->8 {print(‘8’)} |
| term->9 | term->9 {print(‘9’)} |

CFG and SDD tree for 1+2-3, postfix = -+123

Tree with translation scheme for 1+2-3, postfix = -+123

CFG and SDD tree for 1-2+3, postfix = +-123

Tree with translation scheme for 1-2+3, postfix = +-123