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Einführung in den Compilerbau

Aufgabe 1.1

(a) mulExpr ::= expr "*" expr

subvectorExpr ::= expr "{"expr ":" expr ":" expr"}"

recordElementSelectExpr ::= expr "@" expr

(b) primitiveType ::= "int"|"float"|"bool"

vectorType ::= "vector" "<" primitiveType ">" "["expr"]"

(c) callStmt :: = ID "(" (expr ("," expr)*)? ")" ";"

forStmt :: = "for" "(" expr ";" expr ";" expr ")"

returnStmt :: = "return" expr ";"

varDecl :: = "var" type ID ";"

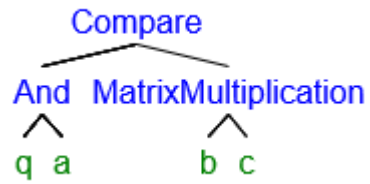
Aufgabe 1.2

(a)
```
if (flag & r > a) {
    r = -1;
    e(q,r);
  }
 else  r= a- (q*d);
```

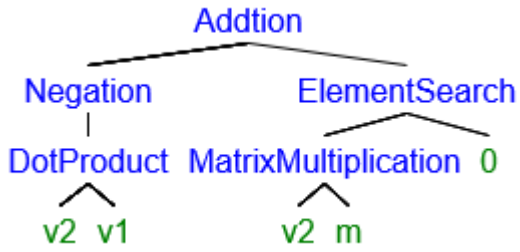
(b)
```
{ vector <int> [3+1] p ;
    foreach (var int i : p) {
        i = k ;
    }
}
```

Aufgabe 1.3

(a)



(b)



(c) - [2, 3] .* [4, 2] + ([2, 3] # [[1, 2] [3, 4]]) = -14 + 11 = -3