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Simple Java EBNF

<program> → {<class>}

<class> → **class** ID [**extends** ID ] **{**{<member>}**}**

<member>→[**public**] [**static**] <type> ID(<field>|<method>)

<field> →{,ID};

<type> → ( void | boolean | int | ID ) [ [ ] ]

<nameType> → boolean | int | ID

<method> → **(** [ <formals> ] **)** [ **throws** ID ] <block>

<formals> → <type> ID { , <type> ID }

<block> → **{** {<stmt>} **}**

<block> → { {<<blockStmt>>} }

<blockStmt> → <if>

| <while>

| <for>

| [ <blockExp> ] ;

| <block>

| return [ <exp> ] ;

| break ;

| continue ;

<locals> → <type> ID [ = <exp> ] { , ID [ = <exp> ] }

<stmt> → <if>

| <while>

| <for>

| [<exp>];

| <block>

| <block>

| **return** [ <exp> ] ;

| **break ;**

| **continue ;**

<if> → **if** ( <exp> ) <stmt> [ **else** <stmt> ]

<while> → **while** ( <exp> ) <stmt>

<for> → **for (** [ <locals> ] **;** [ <exp> ] **;** [ <exp> { , <exp> } ] **)** <stmt>

<actuals> → <exp> { , <exp> }

<infixOperator>  **&&**  | **||** | **==** | **!=** | **>** | **<** | **<=** | **>=** | **+** | **-** | **\*** | **/**

<unaryOperator> **!** | **-**

<literalConstant> → INT | CHAR | STRING | **null** | **true** | **false**

<exp> → ID = <exp> <exp'>

| ID <exp'>

|<literalConstant><exp'>

| (**this** | **super**)<exp'>

| **new** ID **( )** <exp'>

| **new** <nameType> **[**<exp> **]** {**{}**} <exp'>

| <unaryOperator> <exp> <exp'>

| **(** <exp> **)** <exp'>

<exp'> → <infixOperator> <exp><exp'>

| .ID <exp'>

| .ID **(** [<actuals>] **)** <exp'>

| .ID = <exp> <exp'>

| **[**<exp>**] =** <exp><exp'>

| **[** <exp> **]**  <exp'>

| E

