**Expressions：**

**expression**  ::= [conditional\_expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-conditional_expression) | [lambda\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-lambda_expr)

**conditional\_expression** ::= [or\_test](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-or_test) ["if" [or\_test](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-or_test) "else" [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression)]

**expression\_nocond**  ::= [or\_test](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-or_test) | [lambda\_expr\_nocond](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-lambda_expr_nocond)

**or\_test**  ::= [and\_test](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-and_test) | [or\_test](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-or_test) "or" [and\_test](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-and_test)

**and\_test** ::= [not\_test](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-not_test) | [and\_test](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-and_test) "and" [not\_test](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-not_test)

**not\_test** ::= [comparison](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-comparison) | "not" [not\_test](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-not_test)

**comparison**  ::= [or\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-or_expr) ( [comp\_operator](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-comp_operator) [or\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-or_expr) )\*

**comp\_operator** ::= "<" | ">" | "==" | ">=" | "<=" | "!="

| "is" ["not"] | ["not"] "in"

**or\_expr**  ::= [xor\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-xor_expr) | [or\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-or_expr) "|" [xor\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-xor_expr)

**xor\_expr** ::= [and\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-and_expr) | [xor\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-xor_expr) "^" [and\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-and_expr)

**and\_expr** ::= [shift\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-shift_expr) | [and\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-and_expr) "&" [shift\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-shift_expr)

**shift\_expr** ::= [a\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-a_expr) | [shift\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-shift_expr) ( "<<" | ">>" ) [a\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-a_expr)

**a\_expr** ::= [m\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-m_expr) | [a\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-a_expr) "+" [m\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-m_expr) | [a\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-a_expr) "-" [m\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-m_expr)

**m\_expr** ::= [u\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-u_expr) | [m\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-m_expr) "\*" [u\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-u_expr) | [m\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-m_expr) "@" [m\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-m_expr) |

[m\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-m_expr) "//" [u\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-u_expr)| [m\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-m_expr) "/" [u\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-u_expr) |

[m\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-m_expr) "%" [u\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-u_expr)

**u\_expr** ::= [power](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-power) | "-" [u\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-u_expr) | "+" [u\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-u_expr) | "~" [u\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-u_expr)

**power** ::= [await](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-await) ["\*\*" [u\_expr](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-u_expr)]

**await** ::= ["await"] [primary](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-primary)

**primary** ::= [atom](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-atom) | [attributeref](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-attributeref) | [subscription](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-subscription) | [slicing](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-slicing) | [call](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-call)

**atom**  ::= [identifier](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/lexical_analysis.html#grammar-token-identifier) | [literal](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-literal) | [enclosure](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-enclosure)

**literal** ::= [stringliteral](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/lexical_analysis.html#grammar-token-stringliteral) | [bytesliteral](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/lexical_analysis.html#grammar-token-bytesliteral) | [integer](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/lexical_analysis.html#grammar-token-integer)

| [floatnumber](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/lexical_analysis.html#grammar-token-floatnumber) | [imagnumber](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/lexical_analysis.html#grammar-token-imagnumber)

**enclosure** ::= [parenth\_form](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-parenth_form) | [list\_display](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-list_display) | [dict\_display](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-dict_display)

| [set\_display](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-set_display) | [generator\_expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-generator_expression) | [yield\_atom](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-yield_atom)

**parenth\_form** ::= "(" [[expression\_list](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression_list)] ")"

**list\_display** ::= "[" [[expression\_list](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression_list) | [comprehension](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-comprehension)] "]"

**set\_display** ::= "{" ([expression\_list](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression_list) | [comprehension](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-comprehension)) "}"

**dict\_display**  ::= "{" [[key\_datum\_list](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-key_datum_list) | [dict\_comprehension](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-dict_comprehension)] "}"

**key\_datum\_list**  ::= [key\_datum](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-key_datum) ("," [key\_datum](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-key_datum))\* [","]

**key\_datum**  ::= [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression) ":" [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression)

**dict\_comprehension** ::= [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression) ":" [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression) [comp\_for](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-comp_for)

**generator\_expression** ::= "(" [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression) [comp\_for](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-comp_for) ")"

**yield\_atom**  ::= "(" [yield\_expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-yield_expression) ")"

**yield\_expression** ::= "yield" [[expression\_list](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression_list) | "from" [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression)]

**comprehension** ::= [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression) [comp\_for](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-comp_for)

**comp\_for**  ::= "for" [target\_list](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/simple_stmts.html#grammar-token-target_list) "in" [or\_test](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-or_test) [[comp\_iter](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-comp_iter)]

**comp\_iter**  ::= [comp\_for](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-comp_for) | [comp\_if](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-comp_if)

**comp\_if**  ::= "if" [expression\_nocond](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression_nocond) [[comp\_iter](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-comp_iter)]

**expression\_list** ::= [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression) ( "," [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression) )\* [","]

**attributeref** ::= [primary](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-primary) "." [identifier](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/lexical_analysis.html#grammar-token-identifier)

**subscription** ::= [primary](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-primary) "[" [expression\_list](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression_list) "]"

**slicing**  ::= [primary](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-primary) "[" [slice\_list](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-slice_list) "]"

**slice\_list**  ::= [slice\_item](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-slice_item) ("," [slice\_item](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-slice_item))\* [","]

**slice\_item**  ::= [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression) | [proper\_slice](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-proper_slice)

**proper\_slice** ::= [[lower\_bound](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-lower_bound)] ":" [[upper\_bound](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-upper_bound)] [ ":" [[stride](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-stride)] ]

**lower\_bound**  ::= [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression)

**upper\_bound**  ::= [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression)

**stride**  ::= [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression)

**call** ::= [primary](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-primary) "(" [[argument\_list](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-argument_list) [","] | [comprehension](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-comprehension)] ")"

**argument\_list** ::= [positional\_arguments](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-positional_arguments) ["," [keyword\_arguments](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-keyword_arguments)]

["," "\*" [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression)] ["," [keyword\_arguments](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-keyword_arguments)]

["," "\*\*" [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression)]

| [keyword\_arguments](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-keyword_arguments) ["," "\*" [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression)]

["," [keyword\_arguments](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-keyword_arguments)] ["," "\*\*" [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression)]

| "\*" [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression) ["," [keyword\_arguments](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-keyword_arguments)] ["," "\*\*" [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression)]

| "\*\*" [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression)

**positional\_arguments** ::= [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression) ("," [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression))\*

**keyword\_arguments**  ::= [keyword\_item](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-keyword_item) ("," [keyword\_item](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-keyword_item))\*

**keyword\_item**  ::= [identifier](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/lexical_analysis.html#grammar-token-identifier) "=" [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression)

**lambda\_expr**  ::= "lambda" [[parameter\_list](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-parameter_list)]: [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression)

**lambda\_expr\_nocond** ::= "lambda" [[parameter\_list](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-parameter_list)]: [expression\_nocond](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression_nocond)

|  |  |
| --- | --- |
| **Operator** | **Description** |
| [lambda](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#lambda) | Lambda expression |
| [if](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#if) – [else](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#else) | Conditional expression |
| [or](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#or) | Boolean OR |
| [and](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#and) | Boolean AND |
| [not](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#not) x | Boolean NOT |
| [in](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#in), [not in](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#not-in), [is](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#is), [is not](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#is-not), <, <=, >, >=, !=, == | Comparisons, including membership tests and identity tests |
| | | Bitwise OR |
| ^ | Bitwise XOR |
| & | Bitwise AND |
| <<, >> | Shifts |
| +, - | Addition and subtraction |
| \*, @, /, //, % | Multiplication, matrix multiplication division, remainder |
| +x, -x, ~x | Positive, negative, bitwise NOT |
| \*\* | Exponentiation |
| await x | Await expression |
| x[index], x[index:index], x(arguments...), x.attribute | Subscription, slicing, call, attribute reference |
| (expressions...), [expressions...], {key: value...}, {expressions...} | Binding or tuple display, list display, dictionary display, set display |
|  |  |

注：优先级从低到高排列

**Compound statements：**

**compound\_stmt** ::= [if\_stmt](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-if_stmt)

| [while\_stmt](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-while_stmt)

| [for\_stmt](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-for_stmt)

| [try\_stmt](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-try_stmt)

| [with\_stmt](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-with_stmt)

| [funcdef](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-funcdef)

| [classdef](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-classdef)

| [async\_with\_stmt](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-async_with_stmt)

| [async\_for\_stmt](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-async_for_stmt)

| [async\_funcdef](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-async_funcdef)

**suite**  ::= [stmt\_list](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-stmt_list) NEWLINE | NEWLINE INDENT [statement](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-statement)+ DEDENT

**statement**  ::= [stmt\_list](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-stmt_list) NEWLINE | [compound\_stmt](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-compound_stmt)

**stmt\_list**  ::= [simple\_stmt](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/simple_stmts.html#grammar-token-simple_stmt) (";" [simple\_stmt](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/simple_stmts.html#grammar-token-simple_stmt))\* [";"]

**if\_stmt** ::= "if" [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression) ":" [suite](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-suite)

( "elif" [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression) ":" [suite](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-suite) )\*

["else" ":" [suite](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-suite)]

**while\_stmt** ::= "while" [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression) ":" [suite](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-suite)

["else" ":" [suite](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-suite)]

**for\_stmt** ::= "for" [target\_list](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/simple_stmts.html#grammar-token-target_list) "in" [expression\_list](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression_list) ":" [suite](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-suite)

["else" ":" [suite](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-suite)]

**target\_list**  ::= [target](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/simple_stmts.html#grammar-token-target) ("," [target](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/simple_stmts.html#grammar-token-target))\* [","]

**target**  ::= [identifier](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/lexical_analysis.html#grammar-token-identifier)

| "(" [target\_list](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/simple_stmts.html#grammar-token-target_list) ")"

| "[" [target\_list](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/simple_stmts.html#grammar-token-target_list) "]"

| [attributeref](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-attributeref)

| [subscription](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-subscription)

| [slicing](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-slicing)

| "\*" [target](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/simple_stmts.html#grammar-token-target)

**try\_stmt**  ::= try1\_stmt | try2\_stmt

**try1\_stmt** ::= "try" ":" [suite](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-suite)

("except" [[expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression) ["as" [identifier](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/lexical_analysis.html#grammar-token-identifier)]] ":" [suite](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-suite))+

["else" ":" [suite](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-suite)]

["finally" ":" [suite](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-suite)]

**try2\_stmt** ::= "try" ":" [suite](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-suite)

"finally" ":" [suite](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-suite)

**with\_stmt** ::= "with" with\_item ("," with\_item)\* ":" [suite](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-suite)

**with\_item** ::= [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression) ["as" [target](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/simple_stmts.html#grammar-token-target)]

**funcdef**  ::= [[decorators](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-decorators)] "def" [funcname](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-funcname) "(" [[parameter\_list](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-parameter_list)] ")" ["->" [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression)] ":" [suite](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-suite)

**decorators**  ::= [decorator](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-decorator)+

**decorator**  ::= "@" [dotted\_name](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-dotted_name) ["(" [[parameter\_list](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-parameter_list) [","]] ")"] NEWLINE

**dotted\_name**  ::= [identifier](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/lexical_analysis.html#grammar-token-identifier) ("." [identifier](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/lexical_analysis.html#grammar-token-identifier))\*

**parameter\_list** ::= ([defparameter](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-defparameter) ",")\*

| "\*" [[parameter](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-parameter)] ("," [defparameter](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-defparameter))\* ["," "\*\*" [parameter](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-parameter)]

| "\*\*" [parameter](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-parameter)

| [defparameter](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-defparameter) [","] )

**parameter**  ::= [identifier](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/lexical_analysis.html#grammar-token-identifier) [":" [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression)]

**defparameter**  ::= [parameter](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-parameter) ["=" [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression)]

**funcname**  ::= [identifier](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/lexical_analysis.html#grammar-token-identifier)

**classdef**  ::= [[decorators](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-decorators)] "class" [classname](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-classname) [[inheritance](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-inheritance)] ":" [suite](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-suite)

**inheritance** ::= "(" [[parameter\_list](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-parameter_list)] ")"

**classname**  ::= [identifier](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/lexical_analysis.html#grammar-token-identifier)

**async\_funcdef** ::= [[decorators](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-decorators)] "async" "def" [funcname](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-funcname) "(" [[parameter\_list](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-parameter_list)] ")" ["->" [expression](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/expressions.html#grammar-token-expression)] ":" [suite](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-suite)

**async\_for\_stmt** ::= "async" [for\_stmt](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-for_stmt)

**async\_with\_stmt** ::= "async" [with\_stmt](mk:@MSITStore:F:\浙大\大三上\程序设计方法学\python350.chm::/reference/compound_stmts.html#grammar-token-with_stmt)