编译项目 cmake

```
mkdir build && cd build && cmake .. && make && cd ..
```

运行项目

./build/sed

清理项目

rm -rf build

用例

变量声明

type

int: 32位整数float: 32位浮点数bool: 布尔值

```
[type] [variable];
```

```
example,其中>>代表输入
>>int i1=1,i_2___321312=100;
>>int i5=31232+21312;
>>bool b1= i1 == i5;
>>bool b2= i1 !=i5;
>>float f1=1.002,f2=f1+133.0;
>>list;
---Variable List---
name: b1
value: false
name: b2
value: true
name: f1
value: 1.002
name: f2
value: 134.002
name: i1
value: 1
```

```
name: i5
value: 52544

name: i_2___321312
value: 100
```

赋值表达式

右结合,有副作用的表达式,值为最后一个表达式的值

```
[variable] = [value] ;
```

```
example,其中>>代表输入
>>int a,b,c,d,e;
>> a=b=c=d=e=100;
100
>>list;
---Variable List---
name: a
value: 100
name: b
value: 100
name: c
value: 100
name: d
value: 100
name: e
value: 100
-----
```

表达式计算

```
example,其中>>代表输入 >>(1 + 2) * 3 == 3 * (2 + 1) ; true
```

类型检查

```
example,其中>>代表输入
>>int a = (1 + 2) * 3 == 3 * (2 + 1);
INFO: the type of variable a is int
INFO: the type of value is bool
Warning: type mismatch, the statement will be ignored
```

```
>>int a;
>>int a;
warning: Variable a already exists, the statement will be ignored
>>a=true;
INFO: the type of variable a is int
INFO: the type of value is bool
warning: type mismatch, the statement will be ignored
>>a+true;
warning: Invalid operation: int + bool, the statement will be ignored
>>a==1;
false
```

其余报错

```
example,其中>>代表输入
>>b;
INFO: Variable: b
Warning: Variable b not found, the statement will be ignored
>>b=1;
Warning: the identifier b is not declared, the statement will be ignored
1
```