

在 IMP 语言中增加取值和寻址表达式、修改指针指向的内容，其语法进行了如下扩充：

Command ::= *Identifier = Expression

```
execute [*I := E] env sto =  
  let val = evaluate E env sto in  
  let variable loc = find(env, I) in  
  let variable loc' = fetch(sto, loc) in  
  update(sto, loc', val)
```

Expression ::= *Identifier

```
evaluate[*I] env sto =  
  evaluate I' env sto in  
  let variable I' = fetch(sto, I)
```

Expression ::= &Identifier

```
evaluate[&I] env sto =  
  λ loc. if find(sto, I') == evaluate(I) in  
  let variable I' = fetch(sto, loc) then  
    loc
```