Computer Learning

# 目录

# 一、C

# 二、C++

2019/6/18

术语

|  |  |
| --- | --- |
| affordability负担得起 | customer顾客 |
| programmer程序员 | analysis分析 |
| design设计 | programming编程 |
| blackboard黑板 | feedback反馈 |
| software软件 | CAD/CAM计算机辅助设计/制造 |
| GUI图形用户界面 | stereotype陈规旧习 |
| communication交流 | ideals理想境界 |
| testing测试 | correctness正确性 |
| implementation实现 | user用户 |
|  |  |
| // | #include |
| << | library库 |
| comment注释 | linker链接器 |
| compiler编译器 | main() |
| compile-time error编译时错误 | object code目标代码 |
| cout | output输出 |
| executable可执行的 | program程序 |
| function函数 | source code源代码 |
| header头文件 | statement语句 |
| IDE集成开发环境 | pragma编译指示 |
|  |  |
| assignment赋值 | name名字 |
| cin | narrowing窄化 |
| concatenation连接 | object对象 |
| conversion转换 | operation运算 |
| declaration声明 | operator运算符 |
| decrement递减 | type类型 |
| definition定义 | type safety类型安全 |
| increment递增 | value值 |
| initialization初始化 | variable变量 |
|  |  |

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术语

|  |  |
| --- | --- |
| prompt提示符 | loop循环 |
| abstraction抽象 | lvalue左值 |
| begin() | member function成员函数 |
| computation计算 | output输出 |
| conditional statement条件语句 | push\_back() |
| declaration声明 | range-for-statement 范围for语句 |
| definition定义 | repetition 重复 |
| divide and conquer分治 | rvalue 右值 |
| else | selection 选择 |
| end() | size() |
| expression表达式 | sort() |
| for-statement for语句 | statement 语句 |
| function函数 | switch-statement switch语句 |
| if-statement if语句 | vector |
| increment 增量 | while-statement while语句 |
| input 输入 | constexpr常量表达式 |
| iteration 迭代 | reinterpret\_cast重解释转换 |

知识

编写程序的原则（依次）：正确、简单、高效，且关注代码结构，好的程序组织结构有利于软件升级维护。

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术语

|  |  |
| --- | --- |
| repetition循环 | parameter list参数表 |
| block程序块 | formal argument形式参数 |
| compound statement复合语句 | function declaration函数声明 |
| function definition函数定义 | member function call成员函数调用 |

知识点：

4.5.1函数作用：

1）实现计算逻辑的分离；

2）使代码更清晰（通过使用函数名）；

3）利用函数，使得同样的代码在程序中可以被多次使用；

4）减少程序调试的工作量。

4.6.2成员函数调用

对象名.成员函数名（参数表）

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术语

|  |  |
| --- | --- |
| argument error参数错误 | logic error逻辑错误 |
| assertion断言 | post-condition后置条件 |
| catch | pre-condition前置条件 |
| compile-time error编译时错误 | range error范围错误 |
| container容器 | requirement需求 |
| debugging调试 | run-time error运行时错误 |
| error错误 | syntax error语法错误 |
| exception异常 | testing测试 |
| invariant不变式 | throw |
| link-time error链接时错误 | type error类型错误 |
| positive正数的 | range error范围错误 |
| off-by-one error偏一位错误 | estimation估计 |
| bounds error边界错误 | guesstimation瞎估计 |
| precondition前置条件 | post-condition后置条件 |

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术语

|  |  |
| --- | --- |
| analysis分析 | pseudo code伪代码 |
| class | public |
| class member类成员 | syntax analyzer语法分析 |
| data member数据成员 | token单词 |
| design设计 | use case用例 |
| divide by zero被0除 | specification规范 |
| grammar文法，语法 | operand操作数 |
| implementation实现 | tokenize分词 |
| interface接口 | manipulator操纵符 |
| member function成员函数 | manipulate操纵，控制 |
| parser语法分析器 | uppercase大写字母印刷 |
| private | terminated终止 |
| prototype函数原型 | manipulator调制器 |

知识点

1、好的程序的特点：

1）阐明设计和编程技术

2）易于探究程序员做出的各种各样的决策及其相关考虑

3）不需要很多新的语言结构

4）对设计的考虑足够全面

5）易于对解决方案进行改变

6）解决一个易于理解的问题

7）解决一个有价值的问题

8）具有一个足够小，从而可完整实现、彻底理解的求解方案；

2、图形、GUI库、矩阵库

2019/7/5

术语

|  |  |
| --- | --- |
| specifying说明 | demostration示范，证明 |
| format版本，格式 | recursion 递归，循环 |
| character array concatenation字符数组的拼接 | specifier 说明符 |
| linkage连接 | internal linkage内部连接 |
| local variable局部变量 | external linkage外部连接 |
| implicit type conversion隐式转换 | side effect副作用 |
| STL标准模板类库standard template library | cast转换 |
| outside object外部对象 | parallel并行 |
| pass-by-value按值传递 | identifier标识符 |
| pass-by-reference按引用传递 | escape转义 |
| automatic variable自动变量 | typedef类型定义，别名 |
| file scope文件作用域 | semicolon分号 |
| pointer arithmetic指针算术 | dereference废弃，解除参照 |
| primitive基元 | separate compilation分段编译 |
| memory leak内存泄漏 | on the fly实时 |
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# 三、Python

# 四、Golang

# 五、Git

# 六、Operating system

# 七、Others

# 八、GET

2019/6/18

ailment：an illness that is not very serious

self-images：Your self-image is the set of ideas you have about your own qualities and abilities.

diagnose:[be diagnosed with],identify the nature of (an illness or other problem) by examination of the symptoms.

adjacent：~ (to sth) next to or near sth

run-down: is very bad condition, that has not been taken care of

run-down inner-city areas破败不堪的市中心区

run-down transport services 交通运输业的不景气

to be run-down 疲惫不堪

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sustainability持续性，永续性

# 九、NTL

2019/6/23

|  |
| --- |
| ZZ：big integers |
| ZZ\_p：big integers modulo p |
| zz\_p：integers mod “single precision” p |
| GF2：integers mod 2 |
| ZZX：univariate polynomials over ZZ |
| ZZ\_pX：univariate polynomials over ZZ\_p |
| zz\_pX: univariate polynomials over zz\_p |
| GF2X: polynomials over GF2 |
| ZZ\_pE: ring/field extension over ZZ\_p |
| zz\_pE: ring/field extension over zz\_p |
| GF2E: ring/field extension over GF2 |
| ZZ\_pEX: univariate polynomials over ZZ\_pE |
| zz\_pEX: univariate polynomials over zz\_pE |
| GF2EX: univariate polynomials over GF2E |
| in conjunction with 连同，配合 |
| modulus 系数，模数 |

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| --- | --- |
| destructor析构函数 | determinant行列式 |
| assignment operator赋值运算符 | nonsingular非奇异的 |
| contiguous elements连续元素 | declare声明 |
| normal vector法向量 | algebra代数 |
| configure配置 | univariate单变量 |
| arithmetic算法 | coefficient系数 |
| subdirectory子目录 | exponent指数 |
| wrapped封装 | invariant不变量，不变式 |
| documentation文档 | single-precision单精度 |
| esoteric深奥的 | non-negative非负的 |
| plethora大量的，过多的 | gcd()最大公约数greatest common divisor |
| interval区间 | discriminant判别式 |
| subinterval子区间 | CRT中国剩余定理Chinese remainder theorem |
| polynomials多项式 | residue class剩余类 |
| fixed固定的 | linear algebra线性代数 |
| fixed-length定长 | arbitrary任意的 |
| irreducible不可约的 | precision精度 |
| interpolation插值 | accuracy精度 |
| linear equations线性方程组 | modulus模数，系数 |
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# 十、Discrete Mathematics

2019/6/25

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| --- | --- |
| assume假设 |  |
| domain(universe of discourse论域) |  |
| subset子集 |  |
| vice versa反之亦然 |  |
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# 十一、Kali

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| --- | --- |
| activities overview活动概述 |  |
| sidebar工具条 |  |
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