软件4班 叶子繁 201730684427

**7.1**

a) arrays, vectors

b) type, array name

c) subscript

d) constant variable

e) sorting

f) searching

g) two-dimensional

**7.2**

a) False. An array can only store one type of values.

b) False. An array subscript should normally be of data type int.

c) False. They will be initialized to 0.

d) True.

e) False. The element is passed by value. The called function doesn’t modify the value of the element.

**7.3**

a) const int arraySize = 10;

b) double b[10] = { };

c) b[3];

d) b[4];

e) b[9] = 4.667;

f) b[6] = 3.333;

g) cout << fixed << setprecision(2) << b[6] << “ “ << b[7] << “ “ << b[8] << “ “ << b[9]

Display: 3.33 0.00 0.00 1.67

h) for(int i = 0; i<arraySize; ++i)

cout << b[i] << “ “;

Display: 0 0 0 0 0 0 3.333 0 0 4.667

**7.4**

a) int table[arraySize][arraySize];

b) 9

c) for(int i = 0;i < arraySize;++i)

for(int j = 0;j < arraySize;++i)

cin >> table[i][j];

d) for(int i = 0;i < arraySize;++i)

{

for(int j = 0;j < arraySize-1;++j)

cout << a[i][j] << “ “;

if(j == arraySize)

cout << a[i][j] << endl;

}

**7.5**

a) 语句后加了分号

b) 变量未定义类型。

c) 数据越界。

d) 数组中元素表示方法错误，应为a[1][1] = 5;

**7.6**

a) p[0], p[1], p[2], p[3]

b) declaring.

c) row, column

d) m, n, mn

e) d[2][4];

**7.7**

a) False. We specify the name of the array and the value of the particular element.

b) False. An array declaration reserves space for an array.

c) False. You should write int p[100];

d) False. A for statement is optional. A while statement can be used too.

e) False. Nested while statement can be used too.

**7.8**

a) cout << f[6];

b) cin >> b[4];

c) int g[5] = {8,8,8,8,8};

d) double total = 0;

for(int i = 0;i<100;++i)

total += c[i];

cout << total;

e) for(int i = 0;i < 11;++i)

b[i] = a[i];

f) double max = 0.0;

double min = 0.0;

for(int i = 0;int i <99;++i)

{

if(w[i]>max)

max = w[i];

if(w[i]<min)

min = w[i];

}

cout << max << min;

**7.9**

a) int t[2][3];

b) 2

c) 3

d) 6

e) t[1][0], t[1][1], t[1][2]

f) t[0][2], t[1][2]

g) t[0][1] = 0;

h) int t[2][3]={};

int t[2][3]={0,0,0,0,0,0};

i) for(int i = 0;i<2;++i)

for(int j = 0;j<3;++j)

t[i][j] = 0;

j) for(int i = 0;i<2;++i)

for(int j = 0;j<3;++j)

cin >> t[i][j];

k) int min = 0;

for(int i = 0;i<2;++i)

for(int j = 0;j<3;++j)

{

cin >> t[i][j];

if(t[i][j] < min)

min = t[i][j];

}

cout << min;

l) for(int i = 0;i<3;++i)

cout << t[i][j];

m) cout << t[0][2]+t[1][2];

n) for(int i = 0;i<3;++i){

for(int j = 0;j<3;++j)

cout << a[i][j] << “ “;

cout << endl;}

**7.13**

a) int count[10] = {}

b) for(int i = 0;i<15;++i)

a[i] += 1;

c) for(int i = 0;i<12;++i)

cin >> monthlyTemperatures[i];

d) for(int i = 0;i<5;++i)

cout << bestScores[i] << endl;

**7.14**

a) 数据越界

b) 数组定义长度为3但输入了4个数据

c) 数组中数据表示方式错误

**7.16**

sales[0][0], sales[0][1], sales[0][2], sales[0][3], sales[0][4],

sales[1][0], sales[1][1], sales[1][2], sales[1][3], sales[1][4],

sales[2][0], sales[2][1], sales[2][2], sales[2][3], sales[2][4],

**华南理工大学软件学院**

**高级语言程序设计报告**

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| **姓名** | 叶子繁 | **学号** | 201730684427 | **开题时间** | 2017.12.1 |
| **班级** | 软件工程（4）班 | | | **任课教师** | 金龙存 |
| **设计题目** | 7.10 | | | | |
| **一．题目功能描述**  计算职员工资并统计各工资段人数。  **二．设计思路**  使用int的数据类型；  使用数组；  使用cin和cout进行数据的输入输出；  包含iomanip头文件控制字符串宽度。  **三．实现代码**  #include <iostream>  #include <iomanip>  using namespace std;  int main()  {  int a[10000];  int counter = 0;  int n = 0;  while(cin >> n)  {  a[counter] = 200+0.09\*n;  ++counter;  }  int counter2 = 0;  int b[9];  while(counter2<counter)  {  if (a[counter2]<300&&a[counter2]>=200)  ++b[0];  if (a[counter2]<400&&a[counter2]>=300)  ++b[1];  if (a[counter2]<500&&a[counter2]>=400)  ++b[2];  if (a[counter2]<600&&a[counter2]>=500)  ++b[3];  if (a[counter2]<700&&a[counter2]>=600)  ++b[4];  if (a[counter2]<800&&a[counter2]>=700)  ++b[5];  if (a[counter2]<900&&a[counter2]>=800)  ++b[6];  if (a[counter2]<1000&&a[counter2]>=900)  ++b[7];  if (a[counter2]>=1000)  ++b[8];  ++counter2;  }  cout << left << setw(17) << "Ranges" << setw(9) << "Numbers" << endl;  cout << left << setw(17) << "$200-299" << setw(9) << b[0] <<endl;  cout << left << setw(17) << "$300-299" << setw(9) << b[1] <<endl;  cout << left << setw(17) << "$400-299" << setw(9) << b[2] <<endl;  cout << left << setw(17) << "$500-299" << setw(9) << b[3] <<endl;  cout << left << setw(17) << "$600-299" << setw(9) << b[4] <<endl;  cout << left << setw(17) << "$700-299" << setw(9) << b[5] <<endl;  cout << left << setw(17) << "$800-299" << setw(9) << b[6] <<endl;  cout << left << setw(17) << "$900-299" << setw(9) << b[7] <<endl;  cout << left << setw(17) << "$1000 and over" << setw(9) << b[8] <<endl;  }}  **四．界面显示**  784 1569 1865 4891 3584 8695 7486 1532 5416 9853 2156 1563^Z  Ranges Numbers  $200-299 1  $300-299 5  $400-299 0  $500-299 1  $600-299 2  $700-299 0  $800-299 1  $900-299 1  $1000 and over 1  Process returned 0 (0x0) execution time : 24.977 s  Press any key to continue. | | | | | |
| |  | | --- | | **五．批复** | | | | | | |

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| **姓名** | 叶子繁 | **学号** | 201730684427 | **开题时间** | 2017.12.1 |
| **班级** | 软件工程（4）班 | | | **任课教师** | 金龙存 |
| **设计题目** | 7.15 | | | | |
| **一．题目功能描述**  输入一系列整数，重复的数字只保存一次，输出储存的数字。  **二．设计思路**  使用int的数据类型；  使用数组；  使用cin和cout进行数据的输入输出；  使用for语句和while语句控制循环  **三．实现代码**  #include<iostream>  using namespace std;  int main()  {  int a[20];  int q = 0;  cin >> a[0];  int counter=1;  while(cin >> q)  {  int c=0;  for(int i = 0;i<counter;++i)  {  if(a[i]!=q)  ++c;  }  if(c==counter)  {  a[counter] = q;  ++counter;  }  }  for(int i = 0;i<counter;++i)  cout << a[i] << " ";  }**四．界面显示**  1 2 3 4 1 5 2 6 2 7 3 8 9 ^Z  1 2 3 4 5 6 7 8 9  Process returned 0 (0x0) execution time : 12.777 s  Press any key to continue. | | | | | |
| |  | | --- | | **五．批复** | | | | | | |