//二维数组：M个同学N门课成绩处理，字符数组存放姓名。

#include<iostream>

#include<math.h>

#include<iomanip>

using namespace std;

const int M = 4;//学生数

const int N = 3;//课程数

void Input(char name[M][20],int (\*score) [N], int n)

{

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

{

cout << "Input student "<<i+1<<" name:\n";

cin.getline(name[i], 20);

}

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

{

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

{

cout << "Input student " << i + 1 << " the " << j + 1 << " score:\n";

cin >> score[i][j];

}

}

}

void main()

{

char name[M][20] = {"\0"};

int i, j,score[M][N] = { 0 };

int t[M] = { 0 };

float aver[M] = { 0 };

Input(name, score, M);

for (i = 0; i < M; i++)

{

for (j = 0; j < N; j++)

{

t[i] = t[i] + score[i][j];

}

}

for (j = 0; j < N; j++)

{

for (i = 0; i < M; i++)

{

aver[j] = aver[j] + score[i][j];

}

aver[j] /= M;

}

cout << setw(10) << "name";

cout << setw(6) << "sc1";

cout << setw(6) << "sc2" << setw(6) << "sc3" << setw(6) << "Total" << endl;

for (i = 0; i<M; i++)

{

cout << setw(10) << name[i];

for (j = 0; j<N; j++)

cout << setw(6) << score[i][j];

cout << setw(6) << t[i];

cout << endl;

}

cout << setw(10) << "aver";

for (j = 0; j<M; j++)

cout << setw(6) << aver[j];

cout << endl;

system("pause:");

}

//设计程序找出1-100间的质数，显示出来

#include<iostream>

#include<math.h>

using namespace std;

int main()

{

int i,j,k;

for(i=1; i<=100; i+=2)

{

k=(int)sqrt(double(i));

for(j=2; j<=k; j++)

if(i%j==0)

break;

if(j>=k+1)

{

cout<<" "<<i;

}

}

cout<<endl;

}

//把有10个整数元素的数组用冒泡排序法按由小到大升序排列

#include<iostream>

#include<math.h>

#include<iomanip>

const int N=9;

using namespace std;

void main()

{ int n;

int a[N]={0};

cout<<"Input 10 numbers:\n";

int i;

for(i=0; i<=N; i++)

cin>>a[i];

for(int i=0; i<N-1; i++)

{

for(int j=0; j<N-i; j++)

{

if(a[j]<a[j+1])

{

int temp = a[j];

a[j] = a[j+1];

a[j+1] = temp;

}

}

}

for(i=0; i<=N; i++)

cout<<setw(5)<<a[i];

cout<<endl;

system("pause");

}