

# 2018学年秋季学期程序设计基础(1)(黄永峰老师班)期末笔试试题答案

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(ERIC回忆版)

(共20题，回忆出16题我们已经尽力了)

1.执行下列程序的输出结果是`yzxyzxyzt`。

```
#include<iostream>
#include <string>
using namespace std;
void fun(char *s[], int n)
{
    char *t;
    int i, j;
    for (i = 0; i < n - 1; i++)
        for (j = i + 1; j < n; j++)
            if (strcmp(s[i], s[j]) < 0)
            {
                t = s[i]; s[i] = s[j]; s[j] = t;
            }
}
int main()
{
    char c[][10] = { "tsinghua", "China", "xyz", "dianzixi", "luomulou" }, *p[5];
    p = c;
    fun(p, 5);
    cout << *p + 1 << p[0] << c[2] << c[0][0];
}
```

2.执行下列程序的输出结果是`TBowelcomeyou`。

```
#include<iostream>
using namespace std;
int main()
{
    char a[5][10] = { "Tsinghua", "Beijing", "our", "welcome", "you" }, (*p)[5];
    int i;
    p = a;
    for (i = 0; i < 3; i++)
        cout << (*(p + i));
    cout << *(a + i) << *(a + i + 1);
}
```

3.将下列程序生成可执行文件test.exe，使用命令行运行test THIS IS OUR FINAL EXAM，则程序的输出结果是`6,test,T,IS,O,FINAL`。

```
#include<iostream>
```

```
using namespace std;
int main(int c, char *v[])
{
    cout << c << "," << v[0] << "," << *v[1] << "," << v[2] << "," << *v[3] << "," << v[4];
    return 0;
}
```

4.执行下列程序的输出结果是2,5,17,18,9,6,5,3,4,1。

```
#include<iostream>
using namespace std;
void fun(int a[], int flag, int n)
{
    int t, i, j, k;
    for (i = 0; i < n - 1; i++)
    {
        k = i;
        for (j = i + 1; j < n; j++)
            if (flag ? a[k] < a[j]: a[k] > a[j]) k = j;
        if (k != i)
        {
            t = a[k]; a[k] = a[i]; a[i] = t;
        }
    }
}
int main()
{
    int c[10] = { 2,5,18,17,9,3,6,5,4,1 }, i, *p;
    p = c + 4;
    fun(c, 0, 4);
    fun(p, 1, 4);
    for (i = 0; i < 10; i++)
        cout << c[i] << ",";
    return 0;
}
```

5.执行下列程序的输出结果是xiaochen,f,90,91,H,H。

```
#include<iostream>
using namespace std;
typedef struct {
    char name[10];
    char sex;
    int score[3];
} STU;
char *f(STU a, char *c)
{
    STU b = { "Qian", 'm', {85, 90} }, *p = &b;
```

```

    a.score[2] = a.score[0] + a.score[1];
    a = *p;
    b.sex = 'f';
    b.score[2] = b.score[0] + b.score[1];
    c[5] = c[5] - 'a' + 'A';
    return c;
}
void main()
{
    STU c = { "xiaochen", 'f', {90, 91} };
    char b[] = "tsinghua", *d = b;
    d = f(c, b);
    cout << c.name <<', '<< c.sex <<', '<< c.score[0] <<', '<< c.score[1] <<', '<< *(d +
5) <<', '<< b[5];
}

```

6.执行下列程序的输出结果是Huang,f,86,92,178,Huang,f,90,92,178。

```

#include<iostream>
using namespace std;
typedef struct {
    char name[10];
    char sex;
    float score[3];
} STU;
void f(STU *a)
{
    STU b = { "Huang", 'm', {86, 92} }, *p = &b;
    a->score[2] = a->score[0] + a->score[1];
    *a = *p;
    a->sex = 'f';
    a->score[2] = a->score[0] + a->score[1];
    cout << a->name <<","<< a->sex <<","<< a->score[0] <<","<< a->score[1] <<","<<
a->score[2] <<","<<";
}
void main()
{
    STU c = { "Zhao", 'm', {90, 95} }, *p = &c;
    f(&c);
    cout << c.name <<","<< p->sex <<","<< (*p).score[0] + 4 <<","<< p->score[1] <<","<<
(*p).score[2];
}

```

7.将下列程序生成可执行文件test.exe，使用命令行运行test THIS IS OUR FINAL EXAM，则程序的输出结果是ttestTTHISIIISOOURFFINALEEXAM。

```

#include<iostream>
using namespace std;

```

```

int main(int argc, char *argv[])
{
    char **p;
    for (p = argv; argc--; p++)
        cout<<*p<<*p;
    return 0;
}

```

8.执行下列程序的输出结果是654432211。

```

#include<iostream>
using namespace std;
int main()
{
    char s[6], i;
    for (i = 0; i < 6; i++)
        cin >> s[i];
    for (i = 0; i < 6; i++)
    {
        switch (s[i]-'0')
        {
            case 0:
            case 1: cout << (char)(s[i] + 1);
            case 2: cout << (char)(s[i] + 1); break;
            case 3: cout << (char)(s[i] + 1);
            case 4: cout << (char)(s[i] + 1); break;
            default: cout << (char)(s[i] + 1);
        }
    }
}

```

9.执行下列程序的输出结果是7,7,7,7。

```

#include<iostream>
using namespace std;
void swap(int **a, int **b)
{
    int t1, *t2, **t3;
    t3 = a; a = b; b = t3;
    t2 = *a; *a = *b; *b = t2;
    t1 = **a + 1; **a = **b - 1; **b = t1;
}
int main()
{
    int i = 6, j = 8, *p = &i, *q = &j;
    swap(&p, &q);
    cout << i << ", " << j << ", " << *p << ", " << *q;
}

```

10.执行下列程序的输出结果是6,9。

```
#include<iostream>
using namespace std;
int main()
{
    int a, i;
    a = 4, i = 1;
    for(;;i++)
    {
        if (a >= 8) break;
        if (a % 2) { a += 2; continue; }
        a -= 3;
    }
    cout << i << ", " << a;
}
```

11.执行下列程序的输出结果是58。

```
#include<iostream>
using namespace std;
#define N 1+1
int f(int x)
{
    int y;
    if (x == 0 || x == 1)
        return 1;
    y = x * x*f(x - 1) + x * f(x - 2);
    return y;
}
int main()
{
    int z;
    z = f(2 * N) + f(1);
    cout << z;
}
```

12.执行下列程序的输出结果是10,2,8,160    10,2,9,180。

```
#include<iostream>
using namespace std;
int b = 4;
int f(int a)
{
    static int c = 7;
    int b = 1;
    b++; ++c;
    cout << a << ", " << b << ", " << c << ", ";
}
```

```

        return a*b*c;
    }
int main()
{
    int a = 6, i;
    for (i = 0; i < 2; i++)
        cout << f(a + b) << "    ";
}

```

13.执行下列程序的输出结果是h,h。

```

#include<iostream>
#include <stdio.h>
using namespace std;
int main()
{
    FILE *fp;
    char a[10] = { "tsinghua" }, b[10], *p;
    p = b;
    fp = fopen("d.dat", "w+");
    fwrite(a, sizeof(char), 6, fp);
    fseek(fp, sizeof(char) * 3, SEEK_SET);
    fgets(p, 5, fp);
    fclose(fp);
    cout << *(p + 2) << "," << b[2];
}

```

14.执行下列程序的输出结果是21,12,31,9,12,12。

```

#include<iostream>
using namespace std;
#define N 1+3
void fun(int a[][N], int b[])
{
    int i;
    for (i = 0; i < N; i++)
    {
        b[i] = a[i][i] + a[N - 1 - i][i];
        a[i][i] += 3;
    }
}
int main()
{
    int x[N][N] = { 4,7,6,8,11,9,16,5,12,3,15,10,17,2,14,1 }, y[N], i;
    fun(x, y);
    for (i = 0; i < N; i++)
        cout << y[i] << ",";
    for (i = 1; i < N - 1; i++)

```

```
        cout << x[i][N - 2 - i] << ",";
    }
}
```

15. 执行下列程序的输出结果是3456。

```
#include <iostream>
#include <stdio.h>
using namespace std;
int main()
{
    FILE *fp;
    int a[10] = { 1,2,3,4,5,6,7,8,9,0 }, i;
    static char b[10];
    fp = fopen("d.txt", "w");
    for (i = 0; i < 6; i++)
        fprintf(fp, "%d", a[i]);
    fclose(fp);
    fp = fopen("d.txt", "r");
    fflush(fp);
    fseek(fp, 2, SEEK_CUR);
    for (i = 0; i < 5; i++)
        *(b + i) = fgetc(fp);
    fclose(fp);
    cout << b;
    return 0;
}
```

16. 执行下列程序的输出结果是21。

```
#include <iostream>
using namespace std;
#define F(x, y, z) x*y+z
int main( )
{
    int a = 4, b = 3, c = 3, i, z;
    for (i = 0; i < 2; i++)
        z = F(a + b, b + c, c++);
    cout << z;
}
```