

习题 1, 4, 5, 10, 12

Ex1

源代码

```
1  #include <stdio.h>
2
3  int main() {
4      int a[10];
5      int max = 0;
6
7      for (int i = 0; i < 10; i++) {
8          scanf("%d", &a[i]);
9      }
10
11     for (int i = 9; i >= 0; i--) {
12         printf("%d ", a[i]);
13         max = a[i] > a[max] ? i : max;
14     }
15     printf("\nthe index of max element in a is: %d\n", max);
16
17     return 0;
18 }
```

运行结果

```
PS E:\Code_C++\hw08> cd "e:\Code_C++\hw08\" ;
\Ex1 }
8 13 21 34 55 1 1 2 3 5
5 3 2 1 1 55 34 21 13 8
the index of max element in a is: 4
PS E:\Code_C++\hw08> □
```

Ex4

源代码

```
1  #include <stdio.h>
2
3  int main() {
4
5      int a[4][6];
6      int min_row = 0, min_col = 0;
7
8      for (int i = 0; i < 4; i++) {
9          for (int j = 0; j < 6; j++){
10             scanf("%d", &a[i][j]);
11             if (a[min_row][min_col] > a[i][j]) {
12                 min_row = i;
13                 min_col = j;
14             }
15         }
16     }
```

```

16     }
17     printf("min: (%d, %d)", min_row, min_col);
18
19     return 0;
20 }

```

运行结果

```

PS E:\Code_C++\hw08> cd "e:\Code_C++\
\Ex4 }
1 2 3 4 5 6
-1 -2 -3 -4 -5 -6
0 0 0 0 0 0
8 5 3 2 1 1
min: (1, 5)
PS E:\Code_C++\hw08> 

```

Ex5

源代码

```

1  #include <stdio.h>
2
3  int main() {
4
5      int a[5][5];
6      int min[5];
7
8      for (int i = 0; i < 5; i++) {
9          for (int j = 0; j < 5; j++) {
10             scanf("%d", &a[i][j]);
11         }
12     }
13
14     for (int i = 0; i < 5; i++) {
15         min[i] = a[i][0];
16         for (int j = 0; j < 5; j++) {
17             printf("%d ", a[i][j]);
18             if (min[i] > a[i][j])
19                 min[i] = a[i][j];
20         }
21         printf("%d\n", min[i]);
22     }
23
24     return 0;
25 }

```

运行结果

```

PS E:\Code_C++\hw08> cd "e:\Code_C++\hw08\"
1 2 3 4 5
-1 -2 -3 -4 -5
0 0 0 0 0
1 1 2 3 5
23 4123 653 233 -1234 23
1 2 3 4 5 1
-1 -2 -3 -4 -5 -5
0 0 0 0 0 0
1 1 2 3 5 1
23 4123 653 233 -1234 -1234
PS E:\Code_C++\hw08> 

```

Ex10

源代码

```

1  #include <stdio.h>
2
3  int main() {
4
5      char a;
6      int count = 0;
7
8      for (int i = 0; i < 50; i++) {
9          scanf("%c", &a);
10         if (('a' <= a && a <= 'z') || ('A' <= a && a <= 'Z') || ('0' <= a &&
a <= '9')) {
11             count++;
12         }
13     }
14
15     printf("\ncount: %d", count);
16
17     return 0;
18 }

```

运行结果

```

PS E:\Code_C++\hw08> cd "e:\Code_C++\hw08\" ; if ($?) { gcc 1
1234567890qwertyuiopQWERTYUIOP,./; '['-=`<>?:"{}_+~

count: 30
PS E:\Code_C++\hw08> 

```

Ex12

源代码

```

1  #include <stdio.h>
2
3  int isLeapYear(int year) {
4      return ((year % 4 == 0) && (year % 100 != 0)) || (year % 400 == 0);
5  }
6
7  int dayOfYear(int year) {
8      if (isLeapYear(year))

```

```

9         return 366;
10        return 365;
11    }
12
13    int dayOfMonth(int year, int month) {
14        if (month == 1 || month == 3 || month == 5 || month == 7 || month == 8
15        || month == 10 || month == 12)
16            return 31;
17        if (month == 2)
18            return 28 + isLeapYear(year);
19        return 30;
20    }
21
22    int main() {
23
24        int y, m, d, count = -1;
25        scanf("%d%d%d", &y, &m, &d);
26
27        for (int i = 2001; i <= y; i++) {    // 不包括2000年
28            count += dayOfYear(i - 1);      // 算去年是不是闰年
29        }
30        for (int i = 2; i <= m; i++) {
31            count += dayOfMonth(y, m - 1);
32        }
33        count += d;
34
35        count %= 5;
36        printf("此人在%d年%d月%d日“%s”", y, m, d, count <= 2 ? "打鱼" : "晒网");
37
38        return 0;
39    }

```

运行结果

```

PS E:\Code_C++\hw08> cd "e:\Code_C++\hw08\"
2000 1 1
此人在2000年1月1日“打鱼”
PS E:\Code_C++\hw08> cd "e:\Code_C++\hw08\"
2000 1 2
此人在2000年1月2日“打鱼”
PS E:\Code_C++\hw08> cd "e:\Code_C++\hw08\"
2000 1 3
此人在2000年1月3日“打鱼”
PS E:\Code_C++\hw08> cd "e:\Code_C++\hw08\"
2022 11 9
此人在2022年11月9日“晒网”
PS E:\Code_C++\hw08> cd "e:\Code_C++\hw08\"
2022 11 11
此人在2022年11月11日“打鱼”
PS E:\Code_C++\hw08>

```