

1.字符串和日期

1、ASCII码

65——A

97——a

2、升级版三角形

```
1  #include <iostream>
2  #include <algorithm>
3  using namespace std;
4
5  int main()
6  {
7      char c ;
8      cin >> c;
9      if (c >= 'A' && c <= 'Z')
10     {
11         for (int i = 1; i <= c - 'A' + 1; i++)
12         {
13             for (int j = 1; j <= c - 'A' + 1 - i; j++)
14             {
15                 cout << " ";
16             }
17             for (int j = 1; j <= i; j++)
18             {
19                 cout << (char)('A' + j - 1);
20             }
21             for (int j = i - 1; j >= 1; j--)
22             {
23                 cout << (char)('A' + j - 1);
24             }
25             cout << endl;
26         }
27     }
28     else
29     {
30         for (int i = 1; i <= c - '1' + 1; i++)
31         {
32             for (int j = 1; j <= c - '1' + 1 - i; j++)
33             {
34                 cout << " ";
35             }
```

```

36         for (int j = 1; j <= i; j++)
37         {
38             cout << (char)('1' + j - 1);
39         }
40         for (int j = i - 1; j >= 1; j--)
41         {
42             cout << (char)('1' + j - 1);
43         }
44         cout << endl;
45     }
46 }
47 return 0;
48 }

```

3、造房子

```

1  #include <iostream>
2  #include <algorithm>
3  using namespace std;
4
5  int main()
6  {
7      int n, m;
8      cin >> n >> m;
9      for (int i = 1; i <= n; i++)
10     {
11         for (int j = 1; j <= m; j++)
12         {
13             cout << "+-";
14         }
15         cout << "+-" << endl;
16         for (int j = 1; j <= m; j++)
17         {
18             cout << "|*";
19         }
20         cout << "|*" << endl;
21     }
22     for (int j = 1; j <= m; j++)
23     {
24         cout << "+-";
25     }
26     cout << "+-" << endl;
27     return 0;
28 }

```

4、字符串处理

```

1  #include <string.h>
2  int main()
3  {
4      char name[10];

```

```

5     char *str = "jisuanke";
6     strcpy(name,str);
7     printf("%s",name);
8     return 0;
9 }
10
11 int main()
12 {
13     char dest[25];
14     char *str1 = "hello", *str2 = " jisuanke";
15     strcat(dest,str1);
16     strcat(dest,str2);
17     printf("%s",dest);
18     return 0;
19 }
20
21 int strcmp(char *str1, char *str2);
22
23 int strlen(char *str1);

```

5、寻找字符串

```

1  #include <iostream>
2  #include <algorithm>
3  using namespace std;
4
5  char s1[1005],s2[1005];
6  int main()
7  {
8      fgets(s1,1004,stdin);
9      fgets(s2,1004,stdin);
10     int len1 = strlen(s1) - 1, len2 = strlen(s2) - 1;
11     int ans = 0;
12     for (int i = 0; i + len2 - 1 < len1; i++)
13     {
14         bool matched = true;
15         for (int j = 0; j < len2; j++)
16         {
17             if (s1[i+j] != s2[j])
18             {
19                 matched =false;
20                 break;
21             }
22         }
23         if (matched)
24             ans++;
25     }
26     cout << ans;
27     return 0;
28 }

```

6、蒜头君的生日

```
1  #include <iostream>
2  #include <algorithm>
3  using namespace std;
4
5  string weekday[7] = {"Monday","Tuesday","Wednesday","Thursday","Friday","Sat
6
7  int whatday(int y, int m, int d)
8  {
9      int ans = 0;
10     for (int i = 1; i < y; i++)
11     {
12         if ((i%100 != 0 && i % 4 == 0) || i % 400 == 0)
13         {
14             ans += 366 % 7;
15             ans %= 7;
16         }
17         else
18         {
19             ans += 365 % 7;
20             ans %= 7;
21         }
22     }
23     for (int i = 1; i < m; i++)
24     {
25         if ( i == 1 || i == 3 || i == 5 || i == 7 || i == 8 || i == 10 || i
26         {
27             ans += 31 % 7;
28             ans %= 7;
29         }
30         else if ( i == 4 || i == 6 || i == 9 || i == 11)
31         {
32             ans += 30 % 7;
33             ans %= 7;
34         }
35         else if ((y%100 != 0 && y % 4 == 0) || y % 400 == 0)
36         {
37             ans += 29 % 7;
38             ans %= 7;
39         }
40         else
41         {
42             ans += 28 % 7;
43             ans %= 7;
44         }
45     }
46     ans += (d-1)%7;
47     ans %= 7;
48     return ans;
```

```

49 }
50 int main()
51 {
52     int y,m,d;
53     cin >> y >> m >> d;
54     cout << weekday[whatday(y,m,d)] <<endl;
55     return 0;
56 }

```

7、最后一个单词

```

1  #include <cstdio>
2  #include <cstring>
3
4  char s[1005];
5  int main()
6  {
7      while(scanf("%s",s) != EOF );
8          printf("%d",strlen(s));
9      return 0;
10 }

```

8、节假日

```

1  #include <iostream>
2  #include <algorithm>
3  using namespace std;
4
5  int day[13] = {0,31,28,31,30,31,30,31,31,30,31,30,31};
6  int mm[10] = {1,5,10,10,10,12}; //节日月份
7  int dd[10] = {1,1,1,2,3,25};    //节日日期
8
9  void nextday(int &m, int &d)
10 {
11     if ( d == day[m])
12     {
13         m++;
14         d = 1;
15     }
16 }
17
18 int main()
19 {
20     int y,m,d,f,ans,w;
21     scanf("%d",&y);
22     if ((y%100!=0 && y%4==0) || y%400 == 0)
23         day[2]++;
24     for(int i = 6; i < 10;i++) //阳历节日放假日期
25     {
26         scanf("%d%d",&mm[i],&dd[i]);
27     }

```

```

28     scanf("%d",&w);
29     m = 1;
30     d = 1;
31     f = 0; //判断春节
32     ans = 0;
33     while(m!=13)
34     {
35         if(m == mm[6] && d == dd[6]) //在春节里
36         {
37             ans ++;
38             f = 2; //春节天数更新为2
39         }
40         else if (f)
41         {
42             ans++;
43             f--;
44         }
45         else if ( w== 6 || w == 7)
46         {
47             ans++;
48         }
49         else //其他节日
50         {
51             for(int i = 0; i < 10; i++)
52             {
53                 if (m == mm[i] && d == dd[i])
54                 {
55                     ans++;
56                     break;
57                 }
58             }
59         }
60         nextday(m,d);
61         w = w+1;
62         if ( w == 8)
63             w = 1;
64     }
65     printf("%d\n",ans);
66     return 0;
67 }

```

9、跑步锻炼

```

1  #include <iostream>
2  #include <algorithm>
3  using namespace std;
4
5  int day[13] = {0,31,28,31,30,31,30,31,31,30,31,30,31};
6
7  int main()
8  {

```

```
9      int y = 2000, m = 1, d = 1;
10     int w = 6, ans = 0;
11     ans = 2;
12     while(!(y==2020 && m == 10 && d == 1))
13     {
14         if(y%400==0 || (y%100!=0 && y%4==0))
15             day[2]=29;
16         else
17             day[2]=28;
18         d++;
19         w=(w+1)%7;
20         if(d>day[m])
21         {
22             d=1;
23             m++;
24         }
25         if(m>12)
26         {
27             m=1;
28             y++;
29         }
30         if(d==1 || w==1)
31             ans++;
32     }
33     ans++;
34     cout << ans;
35     return 0;
36 }
37
```