1.字符串和日期

1、ASCII码

65——A

97——a

2、升级版三角形

```
#include <iostream>
#include <algorithm>
using namespace std;

int main()
{
    char c ;
    cin >> c;
    if (c >= 'A' && c <= 'Z')
    {
        for (int i = 1; i <= c - 'A' + 1; i++)
        {
            for (int j = 1; j <= c - 'A' + 1 - i; j++)
            {
                cout << " ";
            }
            for (int j = 1; j <= i; j++)
            {
                cout << (char)('A' + j - 1);
            }
            for (int j = i - 1; j >= 1; j--)
            {
                cout << (char)('A' + j - 1);
            }
            cout << endl;
        }
    }
    else
    {
        for (int i = 1; i <= c - '1' + 1; i++)
        {
            for (int j = 1; j <= c - '1' + 1 - i; j++)
            {
                cout << " ";
            }
```

```
            for (int j = 1; j <= i; j++)
            {
                cout << (char)('1' + j - 1);
            }
            for (int j = i - 1; j >= 1; j--)
            {
                cout << (char)('1' + j - 1);
            }
            cout << endl;
        }
    }
    return 0;
}
```

3、造房子

```
#include <iostream>
#include <algorithm>
using namespace std;

int main()
{
    int n, m;
    cin >> n >> m;
    for (int i = 1; i <= n; i++)
    {
        for (int j = 1; j <= m; j++)
        {
            cout << "+-";
        }
        cout << "+-" <<endl;
        for (int j = 1; j <=m; j++)
        {
            cout << "|*";
        }
        cout << "|*" <<endl;
    }
    for (int j = 1; j <= m; j++)
    {
        cout << "+-";
    }
    cout << "+-" <<endl;
    return 0;
}
```

4、字符串处理

```
#include <string.h>
int main()
{
    char name[10];
```

```
    char *str = "jisuanke";
    strcpy(name,str);
    printf("%s",name);
    return 0;
}

int main()
{
    char dest[25];
    char *str1 = "hello", *str2 = " jisuanke";
    strcat(dest,str1);
    strcat(dest,str2);
    printf("%s",dest);
    return 0;
}

int strcmp(char *str1, char *str2);

int strlen(char *str1);
```

5、寻找字符串

```
#include <iostream>
#include <algorithm>
using namespace std;

char s1[1005],s2[1005];
int main()
{
    fgets(s1,1004,stdin);
    fgets(s2,1004,stdin);
    int len1 = strlen(s1) - 1, len2 = strlen(s2) - 1;
    int ans = 0;
    for (int i = 0; i + len2 - 1 < len1; i++)
    {
        bool matched = true;
        for (int j = 0; j < len2; j++)
        {
            if (s1[i+j] != s2[j])
            {
                matched =false;
                break;
            }
        }
        if (matched)
            ans++;
    }
    cout << ans;
    return 0;
}
```

6、蒜头君的生日

```
#include <iostream>
#include <algorithm>
using namespace std;

string weekday[7] = {"Monday","Tuesday","Wednesday","Thursday","Friday","Sat

int whatday(int y, int m, int d)
{
    int ans = 0;
    for (int i = 1; i < y; i++)
    {
        if ((i%100 != 0 && i % 4 == 0) || i % 400 == 0)
        {
            ans += 366 % 7;
            ans %= 7;
        }
        else
        {
            ans += 365 % 7;
            ans %= 7;
        }
    }
    for (int i = 1; i < m; i++)
    {
        if ( i == 1 || i == 3 || i == 5 || i == 7 || i == 8 || i == 10 || i
        {
            ans += 31 % 7;
            ans %= 7;
        }
        else if ( i == 4 || i == 6 || i == 9 || i == 11)
        {
            ans += 30 % 7;
            ans %= 7;
        }
        else if ((y%100 != 0 && y % 4 == 0) || y % 400 == 0)
        {
            ans += 29 % 7;
            ans %= 7;
        }
        else
        {
            ans += 28 % 7;
            ans %= 7;
        }
    }
    ans += (d-1)%7;
    ans %= 7;
    return ans;
```

```
}
int main()
{
    int y,m,d;
    cin >> y >> m >> d;
    cout << weekday[whatday(y,m,d)] <<endl;
    return 0;
}
```

7、最后一个单词

```
#include <cstdio>
#include <cstring>

char s[1005];
int main()
{
  while(scanf("%s",s) != EOF );
  printf("%d",strlen(s));
  return 0;
}
```

8、节假日

```
#include <iostream>
#include <algorithm>
using namespace std;

int day[13] = {0,31,28,31,30,31,30,31,31,30,31,30,31};
int mm[10] = {1,5,10,10,10,12}; //节日月份
int dd[10] = {1,1,1,2,3,25};    //节日日期

void nextday(int &m, int &d)
{
    if ( d == day[m])
    {
        m++;
        d = 1;
    }
}

int main()
{
    int y,m,d,f,ans,w;
    scanf("%d",&y);
    if ((y%100!=0 && y%4==0) || y%400 == 0)
        day[2]++;
    for(int i = 6; i< 10;i++)       //阳历节日放假日期
    {
        scanf("%d%d",&mm[i],&dd[i]);
    }
```

```
    scanf("%d",&w);
    m = 1;
    d = 1;
    f = 0; //判断春节
    ans = 0;
    while(m!=13)
    {
        if(m == mm[6] && d == dd[6])  //在春节里
        {
            ans ++;
            f = 2; //春节天数更新为2
        }
        else if (f)
        {
            ans++;
            f--;
        }
        else if ( w== 6 || w == 7)
        {
            ans++;
        }
        else //其他节日
        {
            for(int i = 0; i < 10; i++)
            {
                if (m == mm[i] && d == dd[i])
                {
                    ans++;
                    break;
                }
            }
        }
        nextday(m,d);
        w = w+1;
        if ( w == 8)
            w = 1;
    }
    printf("%d\n",ans);
    return 0;
}
```

9、跑步锻炼

```
#include <iostream>
#include <algorithm>
using namespace std;

int day[13] = {0,31,28,31,30,31,30,31,31,30,31,30,31};

int main()
{
```

```
    int y = 2000, m = 1, d = 1;
    int w = 6, ans = 0;
    ans = 2;
    while(!(y==2020 && m == 10 && d == 1))
    {
        if(y%400==0||(y%100!=0 && y%4==0))
            day[2]=29;
        else
            day[2]=28;
        d++;
        w=(w+1)%7;
        if(d>day[m])
        {
            d=1;
            m++;
        }
        if(m>12)
        {
            m=1;
            y++;
        }
        if(d==1||w==1)
            ans++;
        ans++;
    }
    cout << ans;
    return 0;
}

```