

第一题:

```
1  #include <stdio.h>
2  #include <math.h>
3  #include <stdlib.h>
4  #pragma warning(disable:4996)
5  bool isprime(int a);
6  int main() {
7      for (int i = 11; i <= 200; i += 2) {
8          if (isprime(i) && isprime(i + 2)) printf("%d %d\n", i, i +
9      2);
10     }
11
12     return 0;
13 }
14 bool isprime(int a) {
15     for (int i = 2; i <= sqrt(a); i++) {
16         if (a % i == 0) return false;
17     }
18     return true;
19 }
```

11 13

17 19

29 31

41 43

59 61

71 73

101 103

107 109

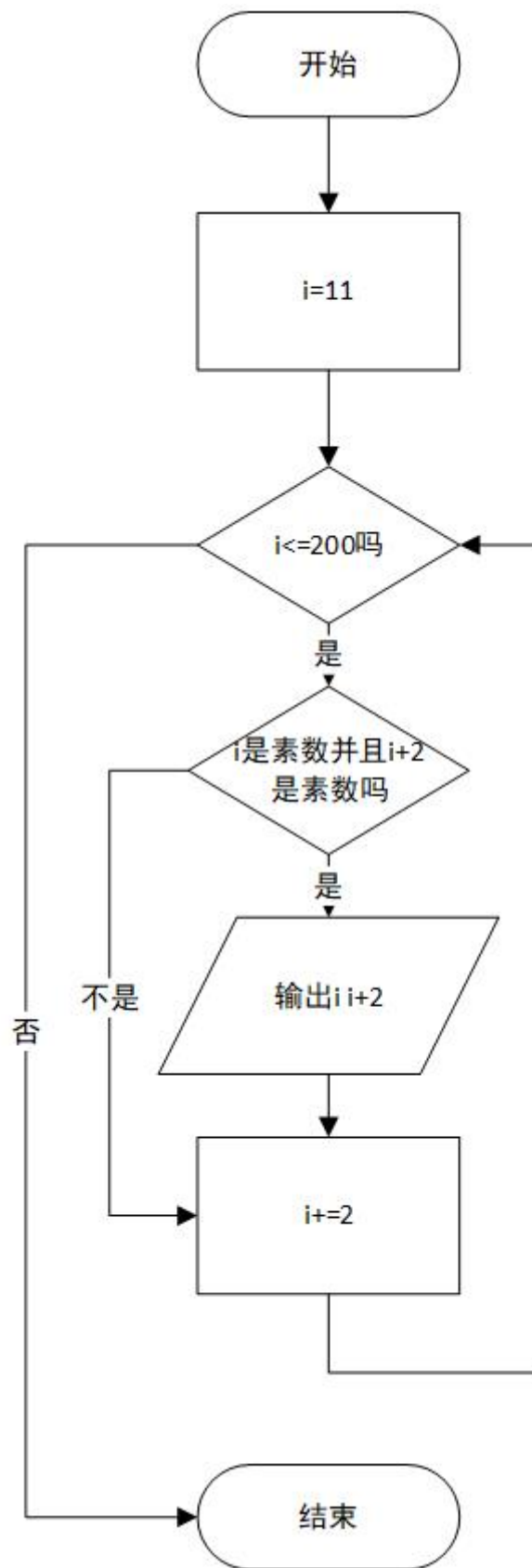
137 139

149 151

179 181

191 193

197 199



第二题

```
1 #include <stdio.h>
2 #include <stdlib.h>
3 #pragma warning(disable:4996)
4 int main() {
```

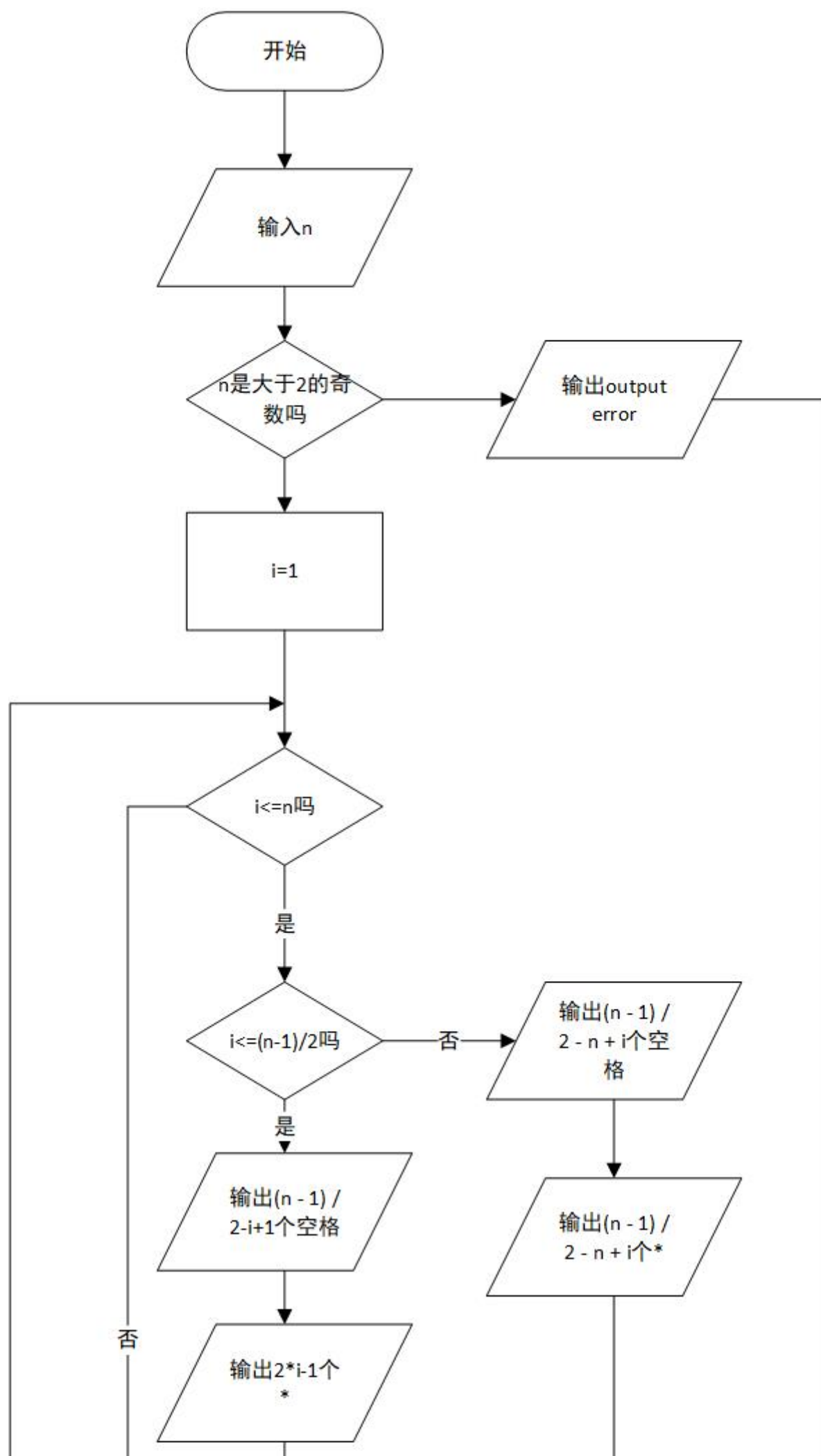
```
5     int n;
6     printf("input n:");
7     scanf("%d", &n);
8     printf("output:\n");
9     if (n > 2 && n % 2 != 0) {
10         for (int i = 1; i <= n; i++) {
11             if (i <= (n - 1) / 2) {
12                 for (int j = 1; j <= (n - 1) / 2 - i + 1; j++) {
13                     printf(" ");
14                 }
15                 for (int j = 1; j <= 2*i - 1; j++) {
16                     printf("*");
17                 }
18                 printf("\n");
19             }
20             else {
21                 for (int j = 1; j <= (n - 1) / 2 - n + i; j++) {
22                     printf(" ");
23                 }
24                 for (int j = 1; j <= 2*(n - i + 1) - 1; j++) {
25                     printf("*");
26                 }
27                 printf("\n");
28             }
29         }
30     } else {
31         printf("Input Error");
32     }
33     return 0;
34 }
35
```

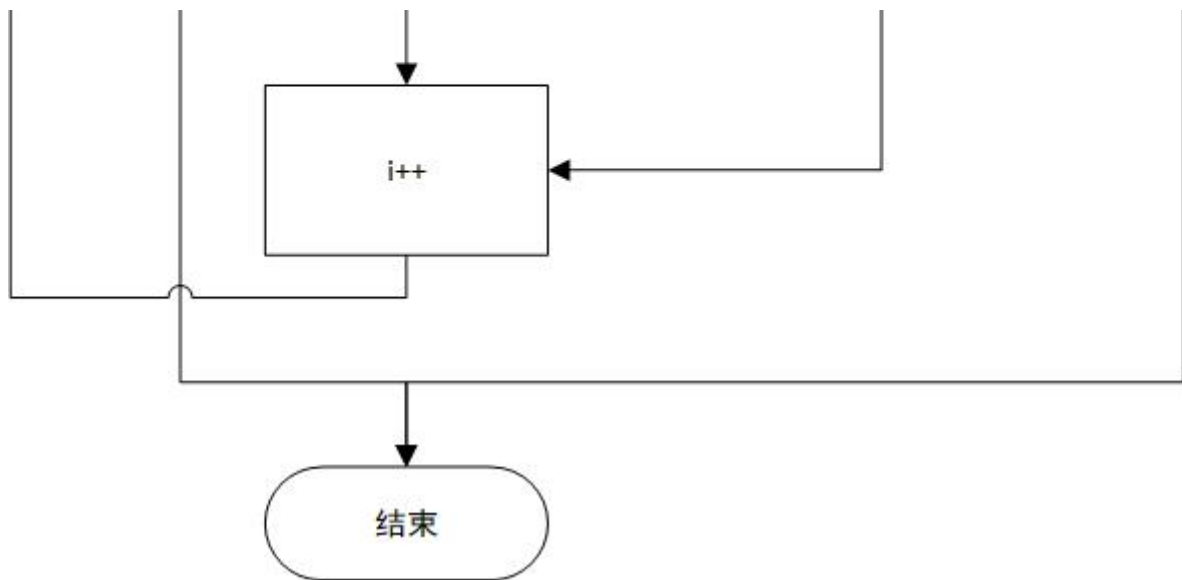
input n:9

output:

*

*





第三题

```
1  #include <stdio.h>
2  #include <math.h>
3  #include <stdlib.h>
4  #pragma warning(disable:4996)
5  bool isprime(int a);
6  int main() {
7      int n;
8      scanf("%d", &n);
9      if (n >= 4 && n % 2 == 0) {
10         for (int i = 2; i <= n; i++) {
11             if (isprime(i) && isprime(n - i)) {
12                 printf("%d = %d + %d", n, i, n - i);
13                 break;
14             }
15         }
16     }
17     else printf("Input Error");
18     return 0;
19 }
20 bool isprime(int a) {
21     for (int i = 2; i <= sqrt(a); i++) {
22         if (a % i == 0) return false;
23     }
24     return true;
25 }
26
```

66

$$66 = 5 + 61$$

