```
1 //
 2 // Created by hengxin on 10/16/21.
3 //
 4
 5 #include <stdio.h>
 6
7 int main() {
8
     int year;
9
     scanf("%d", &year);
10
     if (year % 4 == 0) {
11
12
       if (year % 100 == 0) {
13
         if (year % 400 == 0) {
           printf("The year %d is a leap year.\n", year);
14
15
         } else {
16
           printf("The year %d is not a leap year.\n", year);
17
         }
18
       } else {
19
         printf("The year %d is a leap year.\n", year);
20
       }
21
     } else {
       printf("The year %d is not a leap year.\n", year);
22
23
     }
24
25
     return 0;
26 }
27
```

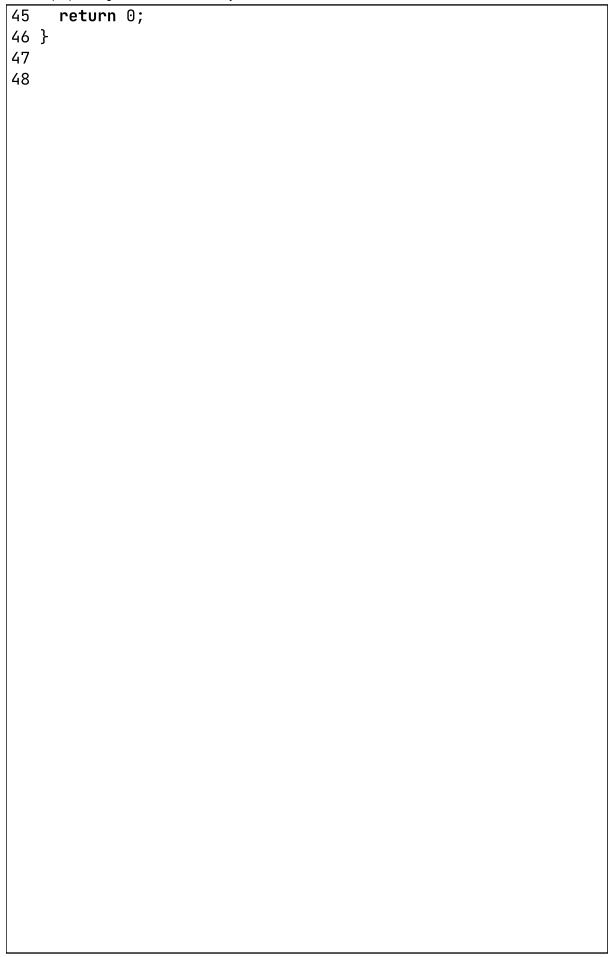
```
1 //
2 // Created by hengxin on 10/16/21.
3 //
4
 5 #include <stdio.h>
7 int main() {
8
     int year;
     scanf("%d",&year);
10
11
     if (year % 4 != 0) {
12
       printf("The year %d is a common year.\n", year);
13
     } else {
       if (year % 100 != 0) {
14
15
         printf("The year %d is a leap year.\n", year);
16
       } else {
17
         if (year % 400 != 0) {
18
           printf("The year %d is a common year.\n", year);
19
         } else {
20
           printf("The year %d is a leap year.\n", year);
21
22
       }
     }
23
24
25
     return 0;
26 }
27
```

```
1 //
2 // Created by hengxin on 10/16/21.
3 //
4
 5 #include <stdio.h>
6
7 int main() {
8
     int year;
     scanf("%d", &year);
9
10
11
     if (year % 4 != 0) {
12
       printf("The year %d is a common year.\n", year);
     } else if (year % 100 != 0) {
13
         printf("The year %d is a leap year.\n", year);
14
15
     } else if (year % 400 != 0) {
16
       printf("The year %d is a common year.\n", year);
17
     } else {
18
       printf("The year %d is a leap year.\n", year);
     }
19
20
21
     return 0;
22 }
```

```
File - D:\cpl\cpl-coding-0\2021-CPL\2-if-for-array\leap.c
 1 //
 2 // Created by hengxin on 10/16/21.
 3 //
 4
 5 #include <stdio.h>
 7 int main() {
      int year;
      scanf("%d", &year);
10
11
      if ((year % 4 == 0 && year % 100 != 0) || year % 400 ==
   0) {
        printf("The year %d is a leap year.\n", year);
12
      } else {
13
        printf("The year %d is not a leap year.\n", year);
14
15
      }
16
17
      return 0;
18 }
```

```
1 //
 2 // Created by hengxin on 10/16/21.
3 //
 4
 5 #include <stdio.h>
 6
7 int main() {
8
     int dogs;
     printf("How many\n");
9
     scanf("%d", &dogs);
10
     printf("So %d\n", dogs);
11
12
13
     int a;
14
     int b;
15
     scanf("%d%d", &a, &b);
16
17
18
     int min;
19
     if (a >= b) {
20
      min = b;
21
     } else {
22
       min = a;
23
     }
24
     printf("min{%d, %d} = %d\n", a, b, min);
25
26
27
     return 0;
28 }
29
```

```
1 //
 2 // Created by hengxin on 10/16/21.
3 //
 4
 5 #include <stdio.h>
7 int main() {
8
     int a;
9
     int b;
     int c;
10
11
12
     scanf("%d%d%d", &a, &b, &c);
13
14
     int min;
15
     if (a > b) {
16
       if (b > c) {
17
         min = c;
18
       } else {
19
         min = b;
20
       }
21
     } else {
22
       if (a > c) {
23
         min = c;
24
       } else {
25
         min = a;
26
       }
27
     }
28
29 // int min_of_a_b;
30 // if (a >= b) {
31 //
       min_of_a_b = b;
32 // } else {
33 //
         min_of_a_b = a;
34 //
       }
35 //
36 // int min;
37 // if (min_of_a_b >= c) {
38 //
       min = c;
39 // } else {
40 //
         min = min_of_a_b;
41 // }
42
43
     printf("min{%d, %d, %d} = %d\n", a, b, c, min);
44
```



```
File - D:\cpl\cpl-coding-0\2021-CPL\2-if-for-array\min.c
 1 //
 2 // Created by hengxin on 10/16/21.
 3 //
 4
 5 #include <stdio.h>
 7 #define NUM 5
 8 int numbers[NUM] = {0};
10 int main() {
      for (int i = 0; i < NUM; i++) {</pre>
11
        scanf("%d", &numbers[i]);
12
13
      }
14
15
      int min = numbers[0];
16
      for (int i = 1; i < NUM; i++) {</pre>
        if (numbers[i] < min) {</pre>
17
          min = numbers[i];
18
19
        }
      }
20
21
22
      printf("min = %d\n", min);
23
24
      return 0;
25 }
```

```
1 //
2 // Created by hengxin on 10/16/21.
3 //
4
5 #include <stdio.h>
7 int main() {
8
     int n;
     scanf("%d", &n);
10
11
     int sum = 0;
12
     for (int i = 1; i <= n; i++) {</pre>
13
      sum += i;
     }
14
15
    printf("%d\n", sum);
16
17
18
     return 0;
19 }
```