

5.1

1).

```
1 - #define TRUE 1;
2 + #define TRUE 1
3
4     if (TRUE)
5         printf("True");
6     else
7         printf("False");
```

2).

```
1 - if (x == 0)
2 + if (x == 0) {
3     a++;
4     b--;
5 - else
6 + }
7 + else {
8     a--;
9     b++;
10 + }
```

5.2

1).

```
1     #include <stdio.h>
2
3     int main() {
4         int i = 0;
5         int sum = 0;
6
7 -         for (; i >= 10; ++i)
8 +         for (; i <= 10; ++i)
9             sum = sum + i;
10        printf("%d\n", sum);
11    }
```

2).

```
1     #include <stdio.h>
2
3     int main() {
4         int i = 0;
5         int sum = 0;
6
7 -         while (i < 10)
8 +         while (i <= 10)
9             sum = sum + i++;
10        printf("%d\n", sum);
11    }
```

3).

```
1     #include <stdio.h>
2
3     int main() {
4         int i;
5         int sum = 0;
```

```
6
7     for (i = 0; i <= 10;)
8 -         sum = sum + ++i ;
9 +         sum = sum + i++;
10    printf("%d\n", sum);
11 }
```

4).

```
1     #include <stdio.h>
2
3     int main() {
4         int i;
5         int sum = 0;
6
7         for (;;)
8             if (i < 10) {
9                 sum = sum + ++i;
10 -                printf("%d\n", sum);
11             }
12             else
13                 break;
14 +        printf("%d\n", sum);
15    }
```

5.3

```
1     #include <stdio.h>
2
3     int main() {
4         int valueA, valueB;
5         int num, divisor;
6         int prime;
7
8         printf("Enter the valueA:");
9         scanf("%d", &valueA);
10
11        printf("Enter the valueB:");
12        scanf("%d", &valueB);
13
14        for (num = valueA; num <= valueB; num++) {
15            prime = 1;
16
17 -            for (divisor = 2; divisor <= num; divisor++)
18 +            for (divisor = 2; divisor < num; divisor++)
19                if ((num % divisor) == 0) {
20                    prime = 0;
21                }
22            if (prime)
23                printf("The number %d is prime\n", num);
24        }
25    }
```

5.4

```
1     #include <stdio.h>
2
3     int main() {
```

```
4 +      int year;
5      int month;
6      int day;
7      int sum;
8
9 -      printf("Input the date(month day):");
10 -     scanf("%d%d", &month, &day);
11 +     printf("Input the date(year month day):");
12 +     scanf("%d%d%d", &year, &month, &day);
13
14     switch (month) {
15         case 1: sum = day; break;
16         case 2: sum = day + 31; break;
17         case 3: sum = day + 59; break;
18         case 4: sum = day + 90; break;
19         case 5: sum = day + 120; break;
20         case 6: sum = day + 151; break;
21         case 7: sum = day + 181; break;
22         case 8: sum = day + 212; break;
23         case 9: sum = day + 243; break;
24         case 10: sum = day + 273; break;
25         case 11: sum = day + 304; break;
26         case 12: sum = day + 334; break;
27     }
28 +     sum += !(year % (year % 100 ? 4 : 400)) && month > 2;
29
30 -     printf("%d.%d is the %dth days.\n", month, day, sum);
31 +     printf("%d.%d.%d is the %dth days.\n", year, month, day, sum);
32 }
```