

```
1 char firstfour(char c) {
2     return c & 0b11110000;
3 }
```

```
1 char lastfour(char c) {
2     return c & 0b00001111;
3 }
```

```
1 char startswith1110(char c) {
2
3
4
5
6 }
```

```
1 #include <stdio.h>
2 #include <string.h>
3
4 void inspect(char s[]) {
5     int index = 0;
6     printf("%s, length %ld: ", s, strlen(s));
7     while(s[index] != 0) {
8         char current = s[index];
9         printf("%c (%hhu 0b", current, current);
10        for(int place = 128; place > 0; place /= 2) {
11            if((current & place) == 0) printf("0");
12            else printf("1");
13        }
14        printf(") ");
15        index += 1;
16    }
17    printf("\n");
18 }
19
20 int main() {
21     char input[100];
22     fgets(input, 100, stdin);
23     printf("\n");
24     inspect(input);
25 }
```

```
$ gcc inspect.c -o inspect
$ ./inspect
José, length 5: J (74 0b01001010) o (111 0b01101111) s (115 0b01110011)   (195 0b11000011)   (169 0b10101001)
$ ./inspect
ピカチュウ
ピカチュウ length 15:   (227 0b11100011)   (131 0b10000011)   (148 0b10010100) // ... continues
$ ./inspect
 , length 4:   (240 0b11110000)   (159 0b10011111)   (166 0b10100110)   (128 0b10000000)
```