

```
1  #include <cs50.h>
2  #include <ctype.h>
3  #include <stdio.h>
4  #include <stdlib.h>
5  #include <string.h>
6
7  int main(int argc, string argv[])
8  {
9      if (argc != 2)
10     {
11         printf("Usage: ./caesar <shift>\n");
12         return 1;
13     }
14
15     int shift = atoi(argv[1]);
16
17     string plaintext = get_string("plaintext: ");
18
19     printf("ciphertext: ");
20     for (int i = 0, j = strlen(plaintext); i < j; i++)
21     {
22         if (isupper(plaintext[i]))
23         {
24             printf("%c", (plaintext[i] - 'A' + shift) % 26 + 'A');
25         }
26         else if (islower(plaintext[i]))
27         {
28             printf("%c", (plaintext[i] - 'a' + shift) % 26 + 'a');
29         }
30         else
31         {
32             printf("%c", plaintext[i]);
33         }
34     }
35     printf("\n");
36 }
```