

```
1. #include<stdio.h>
2. #include<cs50.h>
3. #include<string.h>
4. #include<ctype.h>
5.
6. int main(void){
7.
8.     string s = GetString();
9.     int n = strlen(s);
10.    int i = 0;
11.    if(s!= NULL){
12.        while(s[i]!=' '){
13.            i++;
14.        }
15.        printf("%c",toupper(s[i]));
16.        for( ;i < n;i++ )
17.            if(s[i]!=' '){
18.                while(s[i]!=' '){
19.                    i++;
20.                }
21.                printf("%c",toupper(s[i]));
22.            }
23.    }
24.    printf("\n");
25.
26.
27. }
28.
```

```
1. #include<stdio.h>
2. #include<cs50.h>
3. #include<string.h>
4. #include<ctype.h>
5. #include<stdlib.h>
6.
7. int main(int argc, string argv[]){
8.     if(argc != 2){
9.         printf("No input. Exiting!!");
10.        return 1;
11.    }
12.    int k = atoi(argv[1]);
13.    string ptext = GetString();
14.    string ctext = ptext;
15.    int len = strlen(ptext);
16.    int var = 0;
17.    for(int i=0; i<len;i++){
18.        if(isalpha(ptext[i])){
19.            if(isupper(ptext[i])){
20.                ctext[i] = (ptext[i] + k)%91;
21.                if(ctext[i] < 65){
22.                    ctext[i] = (int)ctext[i] + 65;
23.                }
24.                if(ctext[i] > 90){
25.                    while(ctext[i] > 90){
26.                        ctext[i] = ctext[i] -26;
27.                    }
28.                }
29.            }else if(islower(ptext[i])){
30.                ctext[i] = (ptext[i] + k)%123;
31.
32.                if(ctext[i] < 97){
33.                    var = 97 + ctext[i];
34.                    ctext[i] = var;
35.                }
36.                if(var > 122){
37.                    while(var > 122){
38.                        var = var - 26;
39.                    }
40.                    ctext[i] = var;
41.                }
42.            }
43.        }
44.    }
45. }
46.
47. for(int i=0;i<len;i++){
48.     printf("%c",(char)ctext[i]);
```

```
49.     }
50.     printf("\n");
51.     return 0;
52. }
```

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6.
7. int main(int argc, string argv[]){
8.     if(argc != 2){
9.         printf("No input. Exiting!!");
10.        return 1;
11.    }
12.    string k = argv[1];
13.    string ptext = GetString();
14.    string ctext = ptext;
15.    int len = strlen(ptext);
16.    int keylen = strlen(k);
17.    int var = 0;
18.    for(int i= 0; i<keylen;i++){
19.        k[i] = tolower(k[i]);
20.    }
21.    for(int i=0,j=0; i<len;i++){
22.        if(isalpha(ptext[i])){
23.            if(isupper(ptext[i])){
24.                ctext[i] =(ptext[i] + (k[j]%97))%91;
25.
26.                if(ctext[i] < 65){
27.                    ctext[i] = (int)ctext[i] + 65;
28.                }
29.                if(ctext[i] > 90){
30.                    while(ctext[i] > 90){
31.                        ctext[i] = ctext[i] -26;
32.                    }
33.                }
34.            }else if(islower(ptext[i])){
35.                ctext[i] = (ptext[i] + (k[j]%97))%123;
36.
37.                if(ctext[i] < 97){
38.                    var = 97 + ctext[i];
39.                    ctext[i] = var;
40.                }
41.                if(var > 122){
42.                    while(var > 122){
43.                        var = var - 26;
44.                    }
45.                    ctext[i] = var;
46.                }
47.            }
48.        }
```

```
49.         j = (j+1) % keylen;
50.     }
51.
52. }
53.
54. for(int i=0;i<len;i++){
55.     printf("%c", (char)ctext[i]);
56. }
57. printf("\n");
58. return 0;
59. }
```