

```

1 function vigenere_main()
2     alphabet = collect("АБВГДЕЁЖЗИЙКЛМНОПРСТУФХЦЧШЩЪЫЬЭЮЯ")
3     n = length(alphabet)
4
5
6     while true
7         println("Введите Ш для шифрования, Р для расшифрования, В для выхода")
8         print(">>> ")
9
10        cmd = lowercase(strip(readline()))
11
12
13        cmd == "в" && (println("Выход"); break)
14
15        cmd in ["ш", "р"] || (println("Неверная команда"); continue)
16
17
18        print("Введите текст: ")
19        text = readline()
20        print("Введите пароль: ")
21        password = readline()
22
23        clean_chars = collect(replace(uppercase(text), " " => ""))
24
25        pass_chars = collect(replace(uppercase(password), " " => ""))
26
27
28        key_chars = Char[]
29
30        for i in 1:length(clean_chars)
31
32            push!(key_chars, pass_chars[(i-1) % length(pass_chars) + 1])
33        end
34
35
36        result_chars = Char[]
37
38        for i in 1:length(clean_chars)
39            text_char = clean_chars[i]
40            key_char = key_chars[i]
41
42
43            text_idx = findfirst(==(text_char), alphabet)
44            key_idx = findfirst(==(key_char), alphabet)
45
46
47            if text_idx != nothing && key_idx != nothing
48                if cmd == "ш"
49
50                    new_idx = (text_idx + key_idx - 1) % n
51
52                    new_idx == 0 && (new_idx = n)
53                else
54
55                    new_idx = (text_idx - key_idx) % n
56
57                    new_idx <= 0 && (new_idx += n)
58                end
59
60                push!(result_chars, alphabet[new_idx])

```

```
61         else
62
63             push!(result_chars, text_char)
64         end
65     end
66
67
68     result = String(result_chars)
69
70     println("Результат: $result")
71
72     println("-"^50)
73 end
74 end
75
76
77 vigenere_main()
```