```
function fleissner_main()

    while true

        println("Введите Ш для шифрования, Р для расшифрования, В для выхода")

        print(">>> ")

        cmd = lowercase(strip(readline()))


        cmd == "в" && (println("Выход"); break)

        cmd in ["ш", "р"] || (println("Неверная команда"); continue)


        print("Введите текст: ")

        text = readline()

        print("Введите пароль (4 символа): ")

        password = readline()


        clean_chars = collect(replace(uppercase(text), " " => ""))

        pass_chars = collect(uppercase(password))

        k = 2


        size_2k = 2k

        grille = falses(size_2k, size_2k)

        for i in 1:k, j in 1:k
            grille[i, j] = grille[i, k+j] = grille[k+i, j] = grille[k+i, k+j] = true
        end


        total = size_2k^2

        length(clean_chars) < total && append!(clean_chars, fill('A', total - length(clean_chars)))

        table, idx, mask = fill(' ', size_2k, size_2k), 1, copy(grille)


        for _ in 1:4

            for i in 1:size_2k, j in 1:size_2k

                mask[i,j] && idx <= length(clean_chars) && (table[i,j] = clean_chars[idx]; idx += 1)
            end

            mask = reverse(mask, dims=1)'
        end

```

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59
60          sorted_cols = sort(1:length(pass_chars), by=i -> pass_chars[i])
61
62          result = join([table[i,j] for j in sorted_cols for i in 1:size_2k])
63
64
65          println("Результат: $result")
66
67          println("-"^50)
68      end
69  end
70
71
72  fleissner_main()
```