Password Generator

Presentation

The project

The Mission :

- Develop a password generator in C language.
- For all users (children, senior, customers, …)
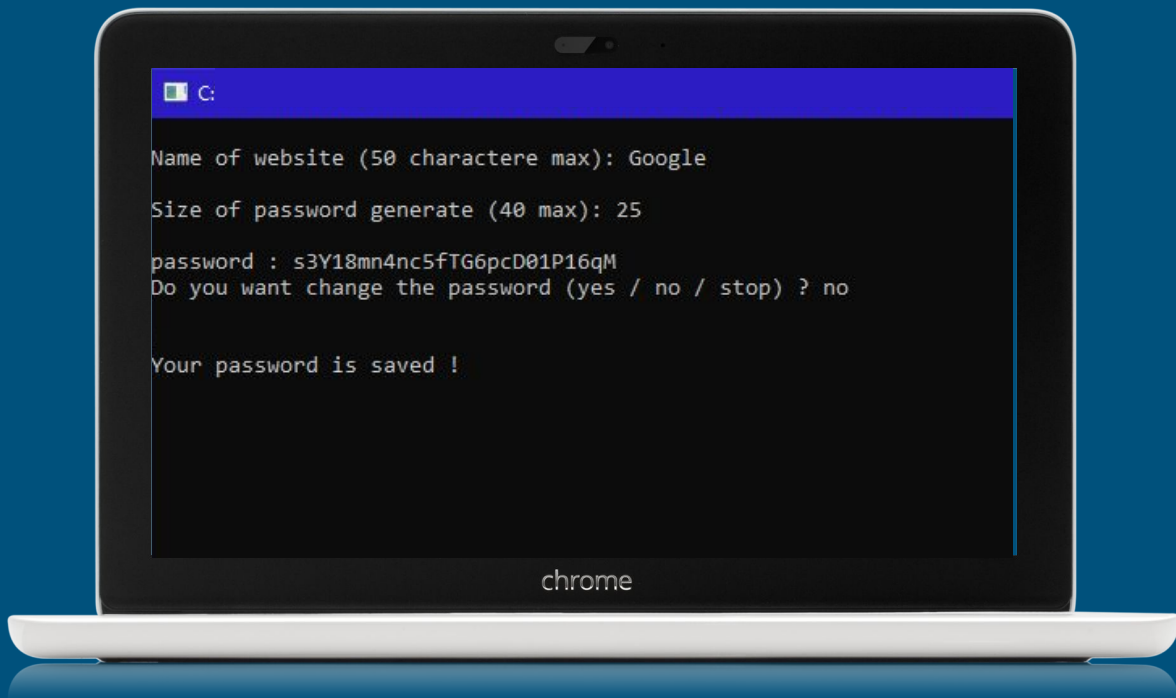
You can :

- Choose
- Create
- Save !

Example
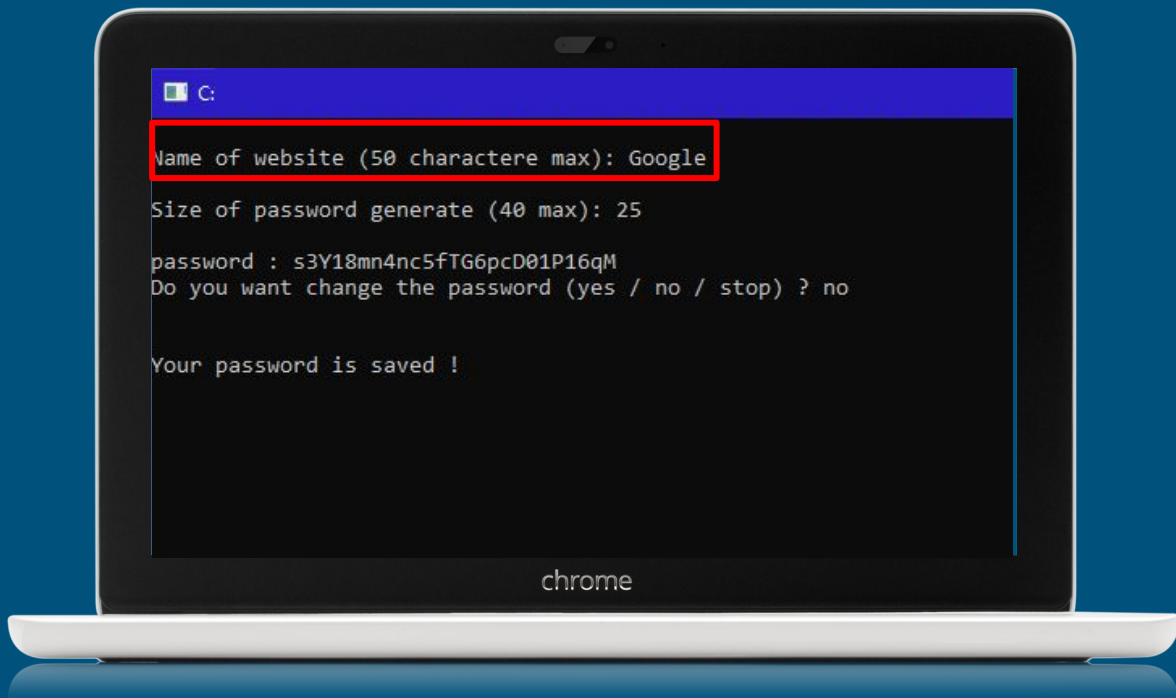
Generate a password !

Just click on the .exe

Generate a password !

A window opens


```
C:

Name of website (50 charactere max): Google

Size of password generate (40 max): 25

password : s3Y18mn4nc5fTG6pcD01P16qM
Do you want change the password (yes / no / stop) ? no


Your password is saved !
```
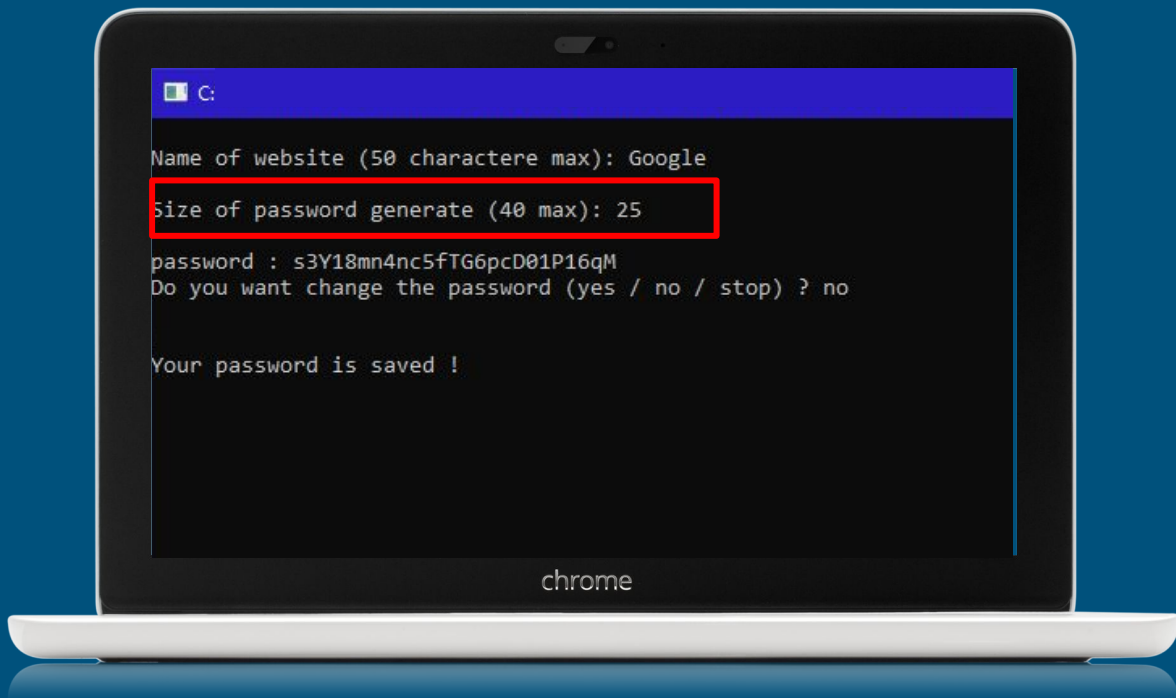
Generate a password !

Choose your website

Generate a password !

Choose the size


```
C:
Name of website (50 charactere max): Google
size of password generate (40 max): 25
password : s3Y18mn4nc5fTG6pcD01P16qM
Do you want change the password (yes / no / stop) ? no


Your password is saved !
```

Generate a password !

discover your password and save it !
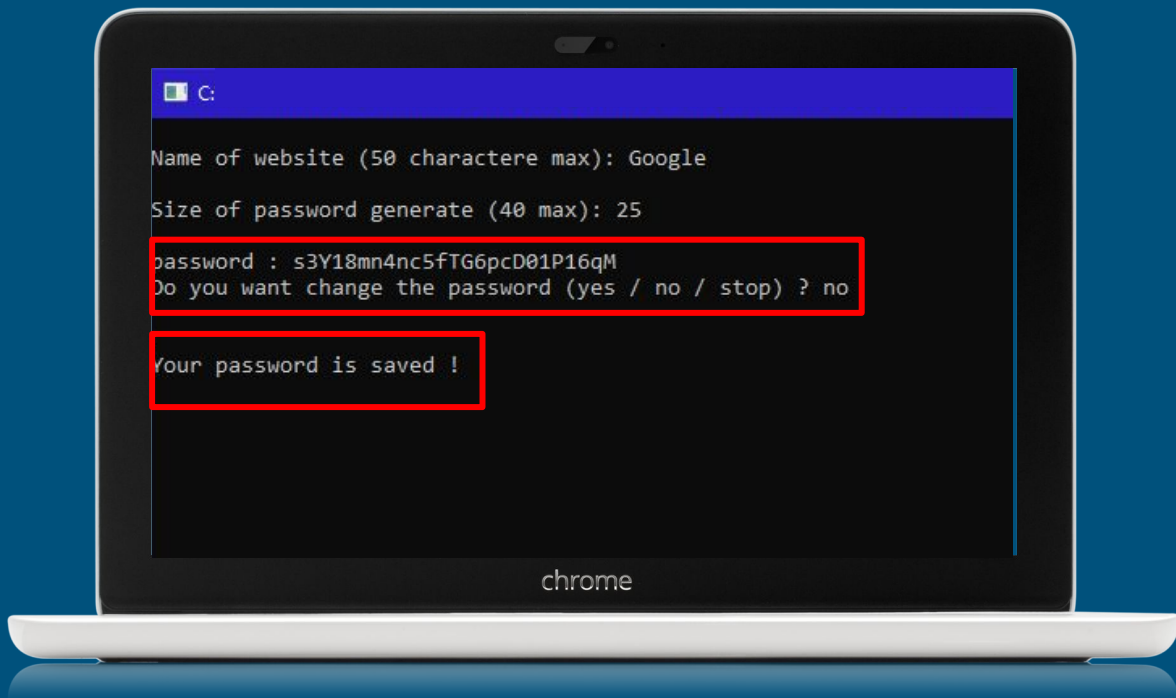
Name of website (50 charactere max): Google

Size of password generate (40 max): 25

password : s3Y18mn4nc5fTG6pcD01P16qM
Do you want change the password (yes / no / stop) ? no
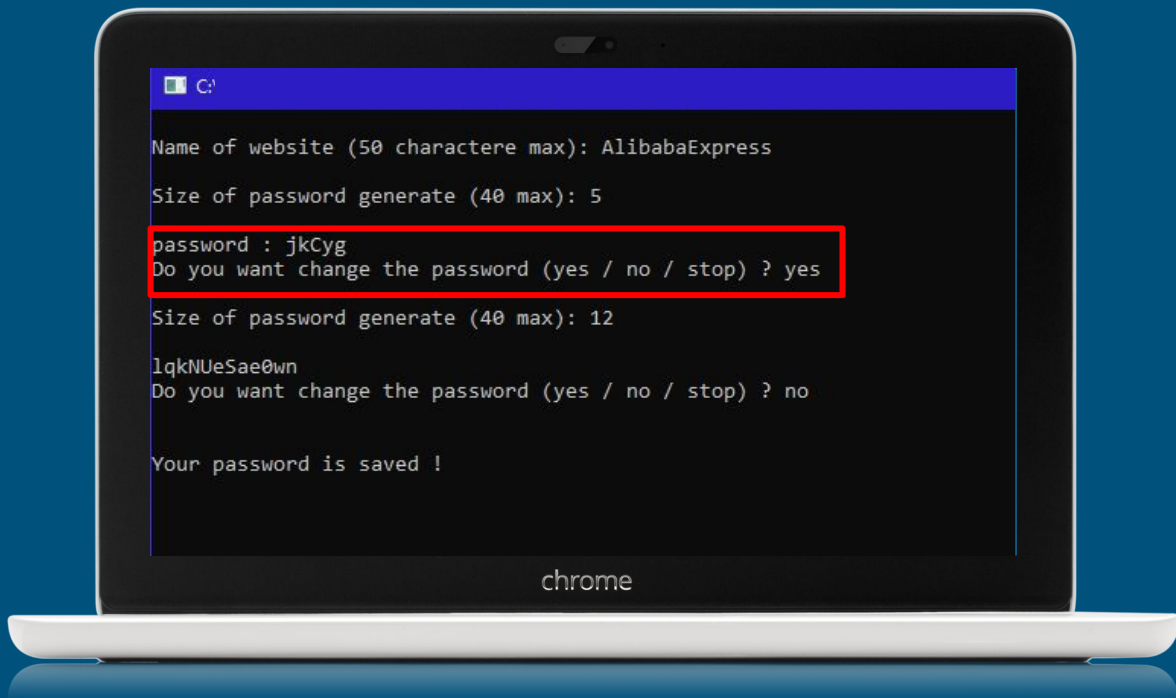
Your password is saved !

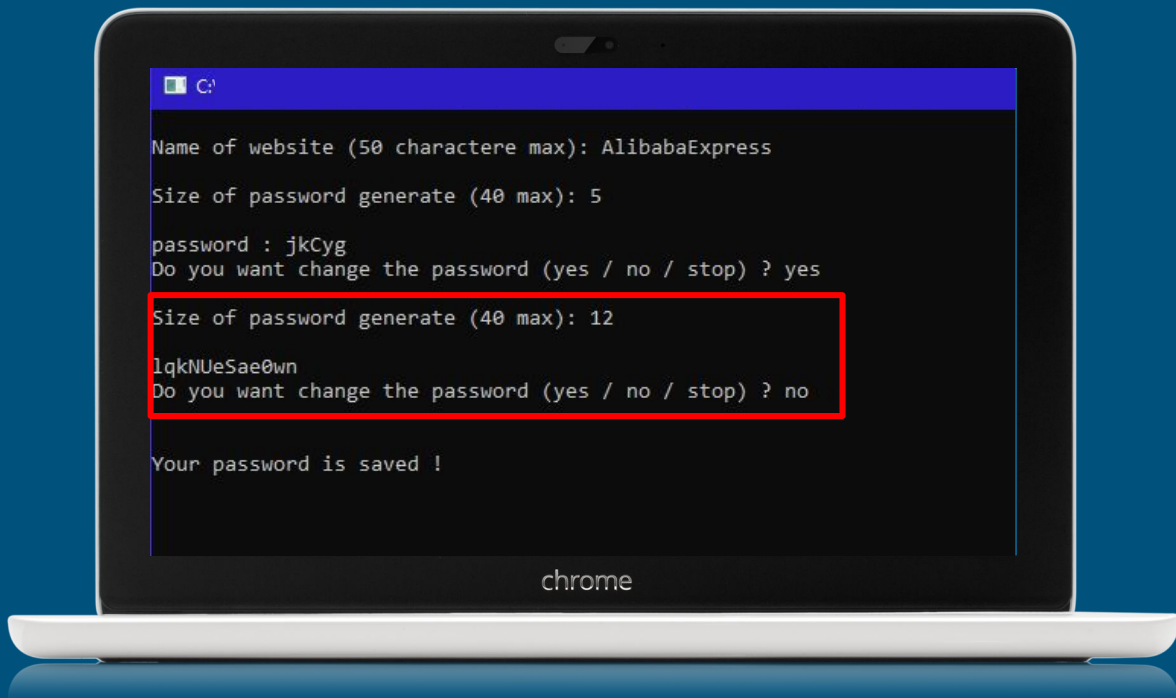# Choose your favorite !

Choose an other password

Choose your favorite !

Choose an other password

Choose your favorite !

generate a new password !

Name of website (50 charactere max): AlibabaExpress

Size of password generate (40 max): 5

password : jkCyg
Do you want change the password (yes / no / stop) ? yes

Size of password generate (40 max): 12

lqkNUeSae0wn
Do you want change the password (yes / no / stop) ? no

Your password is saved !

Choose your favorite !

Save the new password !

Name of website (50 charactere max): AlibabaExpress

Size of password generate (40 max): 5

password : jkCyg
Do you want change the password (yes / no / stop) ? yes

Size of password generate (40 max): 12

lqkNUeSae0wn
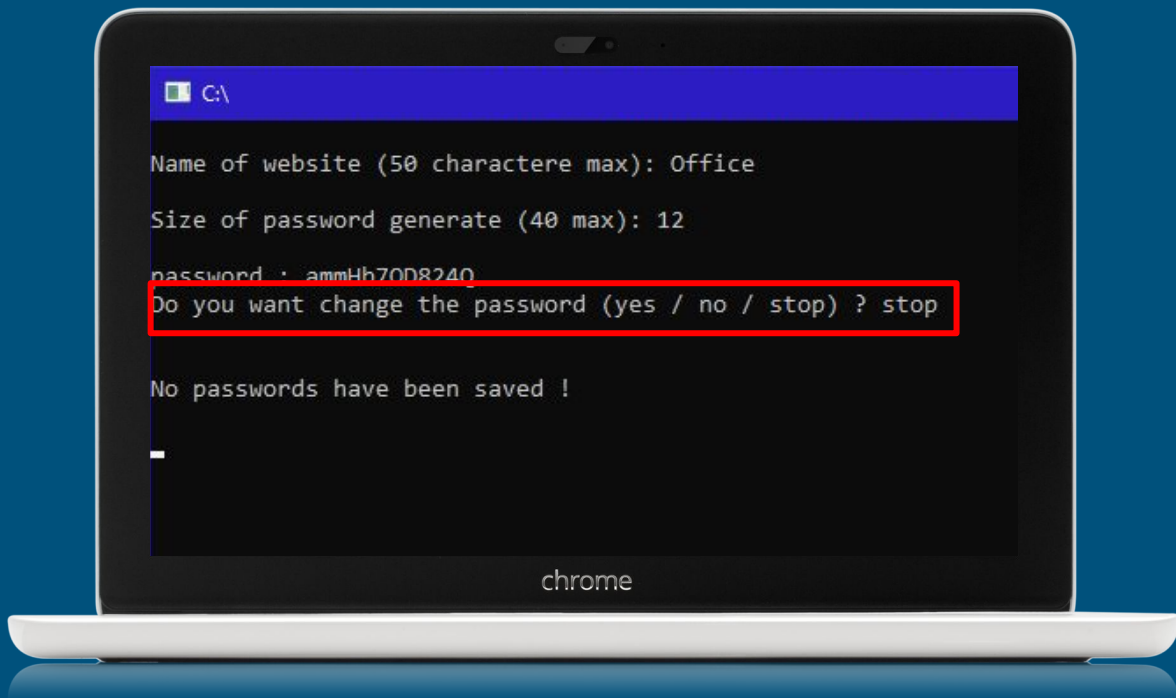Do you want change the password (yes / no / stop) ? no

Your password is saved !
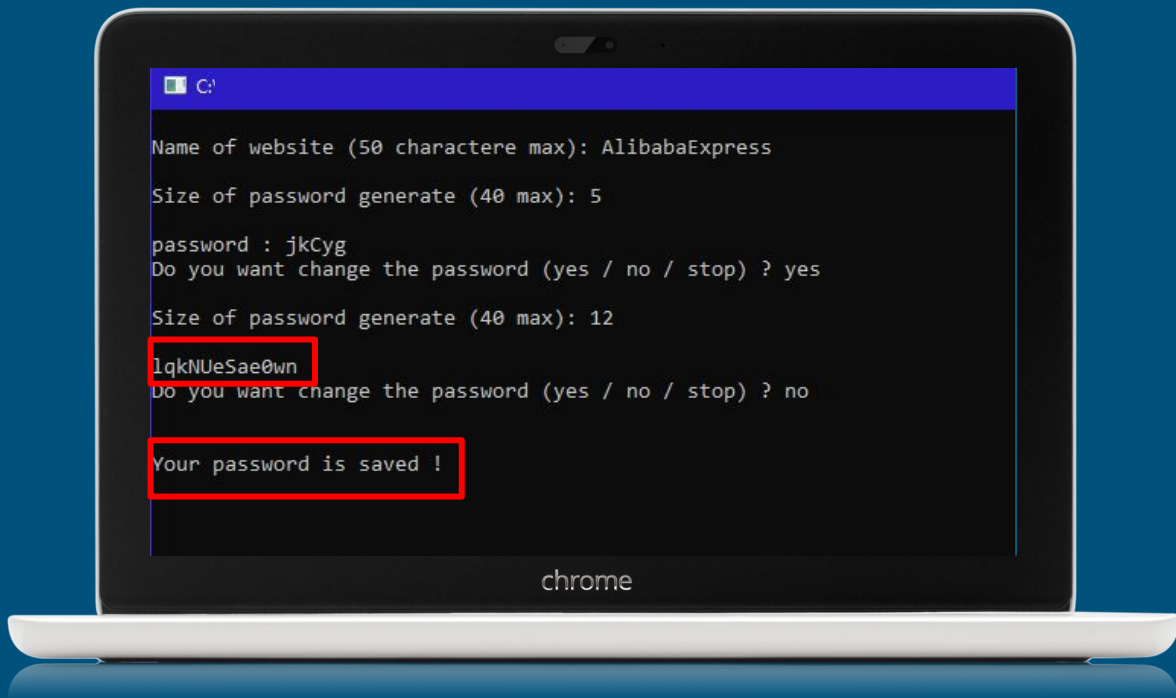
Stop the save !

you made a mistake ?

Stop the save !

Stop the program

Stop the save !

the disaster is avoided !

C:\

Name of website (50 charactere max): Office

Size of password generate (40 max): 12

password : ammHb7OD824Q
Do you want change the password (yes / no / stop) ? stop
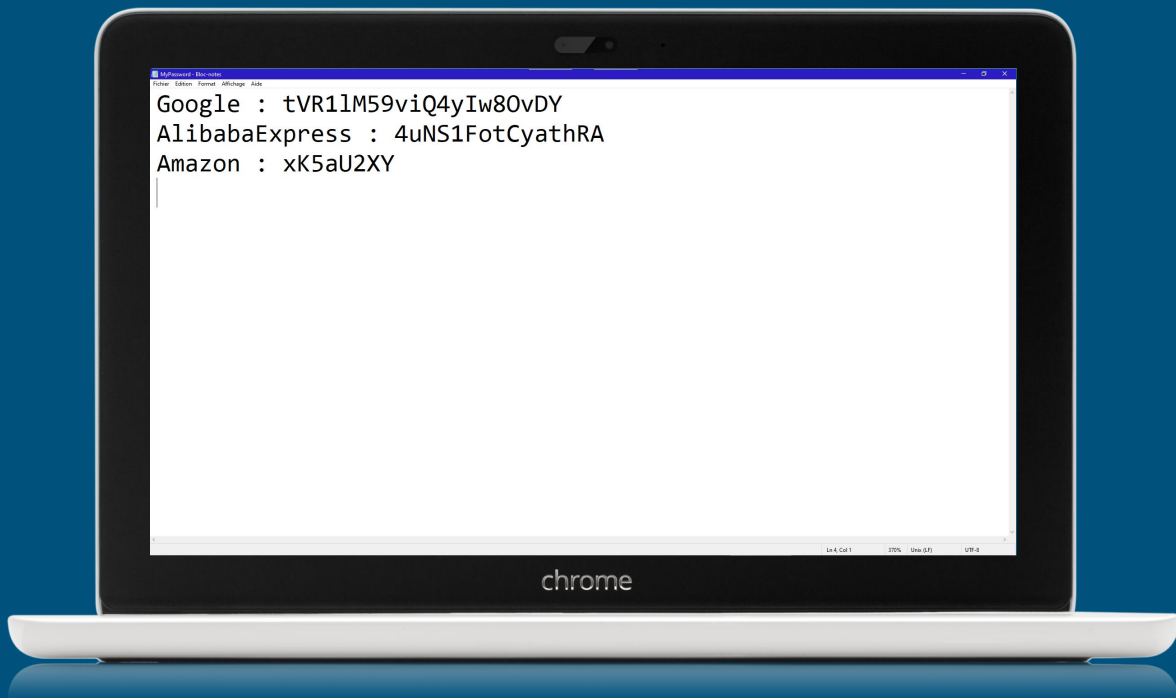
No passwords have been saved !

chrome
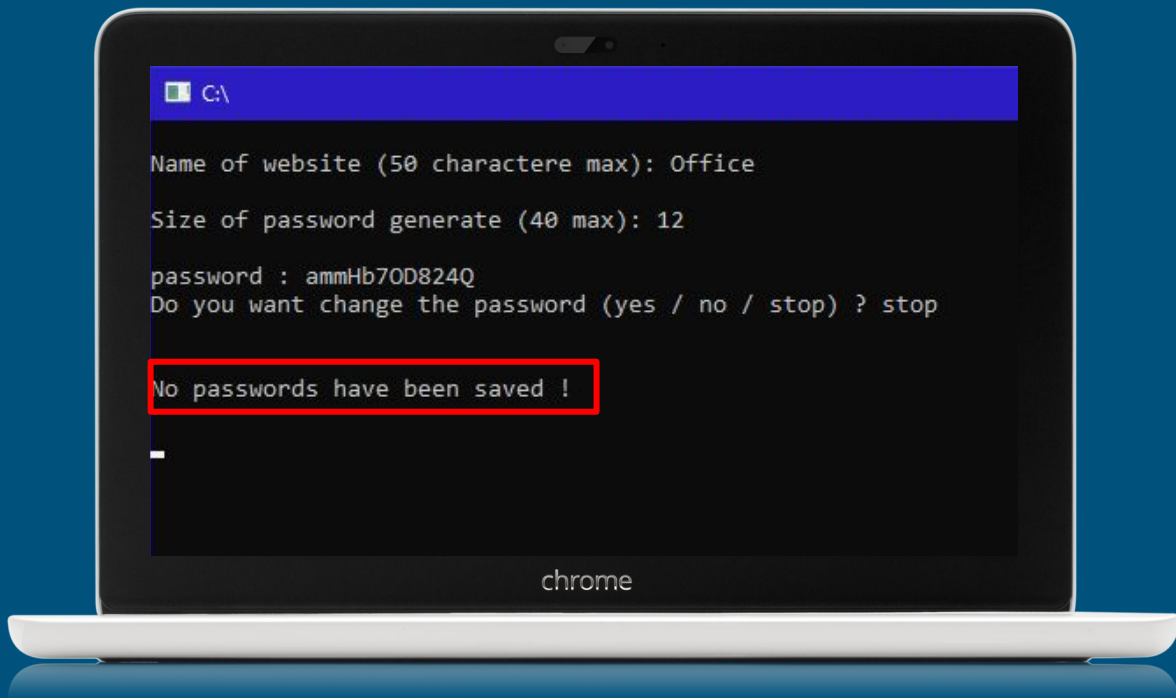
Your saved passwords

recover your passwords

Your saved passwords

open the .txt file.

MyPassword - Bloc-notes
Fichier Edition Format Affichage Aide

Google : tVR1lM59viQ4yIw8OvDY
AlibabaExpress : 4uNS1FotCyathRA
Amazon : xK5aU2XY

Your saved passwords

recover your website
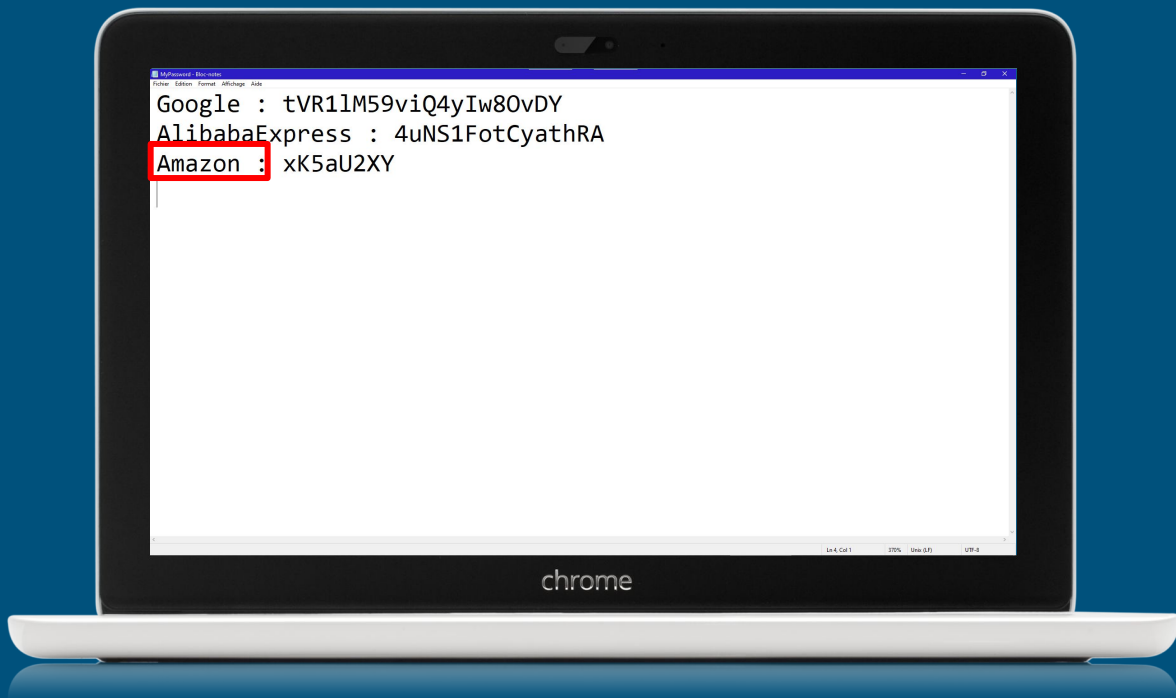
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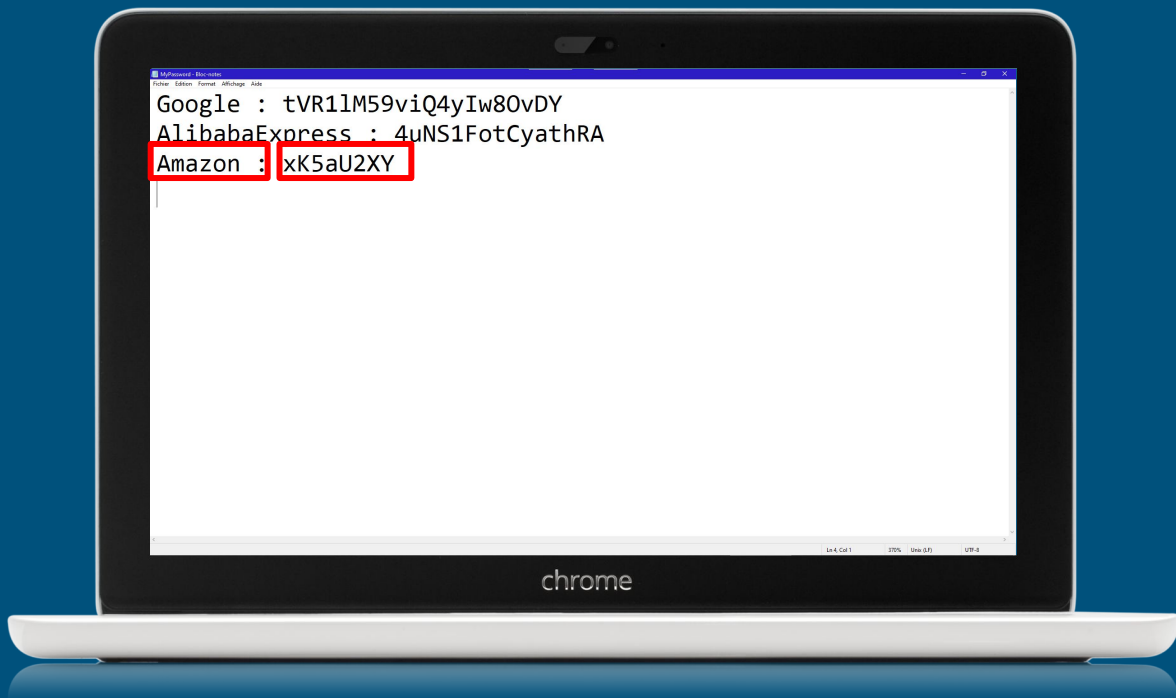
The Code

Header code

```c
1   #include <stdio.h>
2   #include <stdlib.h>
3   #include <time.h>
4   #include <string.h>
5
6   #define NB_LETTRES 26
7   #define NB_NOMBRE 10
8   #define NB_TYPE 3
9
10  #define CHAR_MAX 50
```

Include directives

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1   #include <stdio.h>
2   #include <stdlib.h>
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Constantes Values

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2    #include <stdlib.h>
3    #include <time.h>
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6    #define NB_LETTRES 26
7    #define NB_NOMBRE 10
8    #define NB_TYPE 3
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10   #define CHAR_MAX 50
```

New type definition

```c
11
12    typedef char alphabet[NB_LETTRES];
13
14    const alphabet minuscules = {'a','b','c','d','e','f','g','h','i','j','k','l','m','n','o','p','q','r','s'
15
16    const alphabet majuscules = {'A','B','C','D','E','F','G','H','I','J','K','L','M','N','O','P','Q','R','S'
17
18    const char nombres[NB_NOMBRE] = {'0','1','2','3','4','5','6','7','8','9'};
19
```

Constante variables

```
11
12    typedef char alphabet[NB_LETTRES];
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16    const alphabet majuscules = {'A','B','C','D','E','F','G','H','I','J','K','L','M','N','O','P','Q','R','S'
17
18    const char nombres[NB_NOMBRE] = {'0','1','2','3','4','5','6','7','8','9'};
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```

Definition of functions

```
20
21    char completePassword();
22
23    int Alea(int max);
24
25    void generatePassword(int max, char password[]);
26
27    void writeFile(char website[], char password[], int max);
28
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Main()

```c
79  int main(){
80
81      srand(time(NULL));
82
83      //Initialisation
84      int max ;
85      char password[CHAR_MAX];
86      char choice[CHAR_MAX];
87      char website[CHAR_MAX];
88
89      printf("\nName of website (50 charactere max): ");
90      scanf("%s",website);
91
92      printf("\nSize of password generate (40 max): ");
93      scanf("%d",&max);
94
95      generatePassword(max,password);
96      printf("\npassword : %s",password);
97
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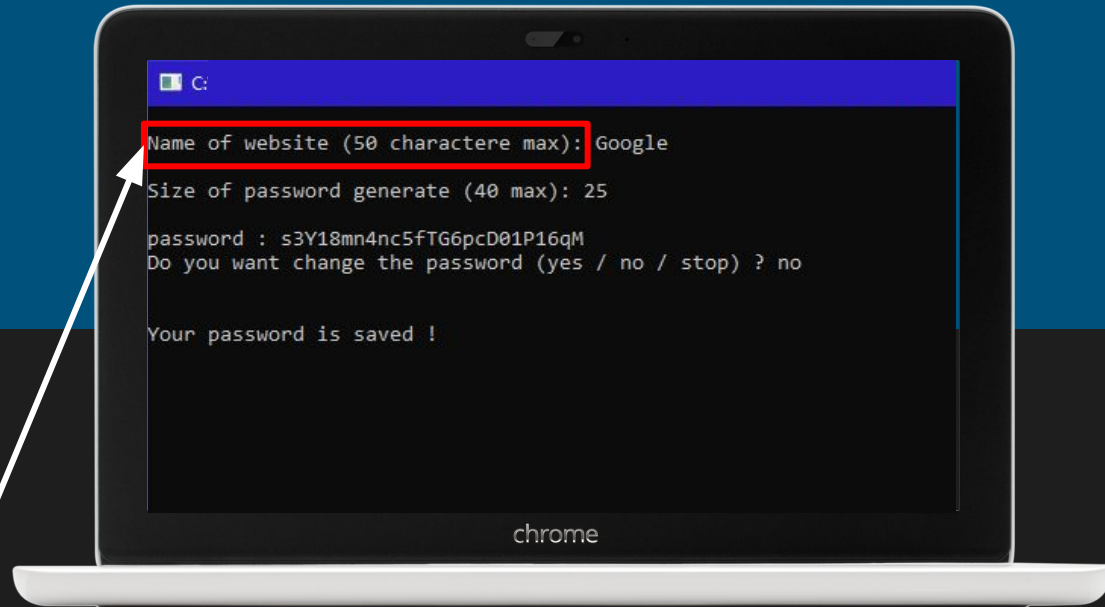```

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    scanf("%d",&max);

    generatePassword(max,password);
    printf("\npassword : %s",password);
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Do you want change the password (yes / no / stop) ? no

Your password is saved !

chrome

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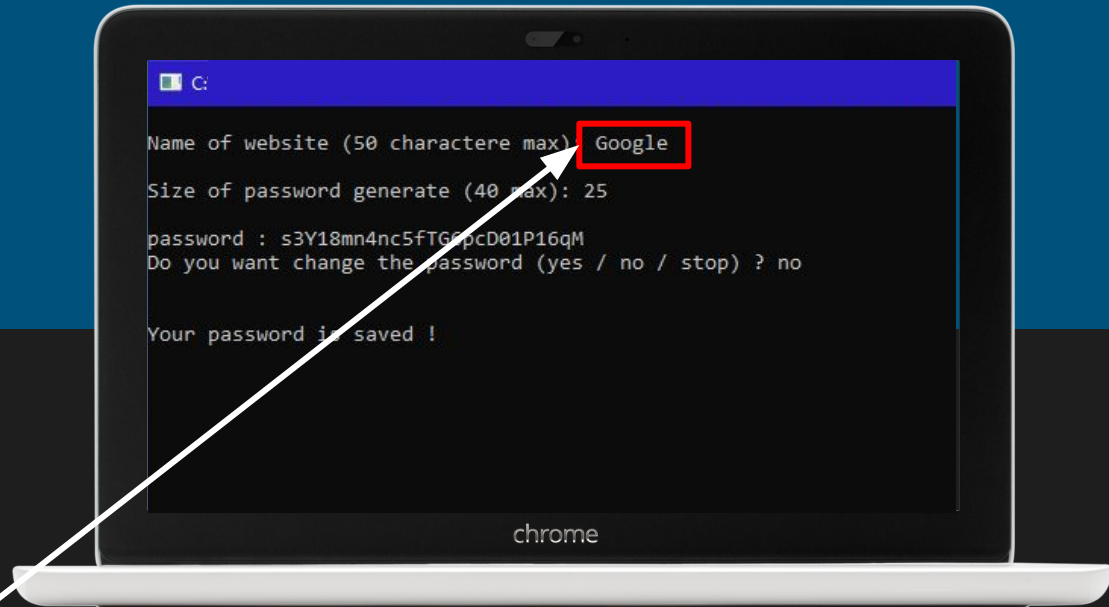
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98      printf("\nDo you want change the password (yes / no / stop) ? ");
99      scanf("%s",choice);
100
101     if(strcmp("stop",choice)==0){
102         printf("\n\nNo passwords have been saved !\n\n");
103         return EXIT_SUCCESS;
104     }
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    writeFile(website,password,max);
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Code improvements

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- **Secure**
    - **access to the txt file.**
    - **encrypted password**

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- **Optimize**
    - **the code structure.**

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- **Optimize**
    - **the code structure.**

- **Some features**
    - **identifier login**
    - **internet links**
    - **more rules of generation**

Thank you for listening to me