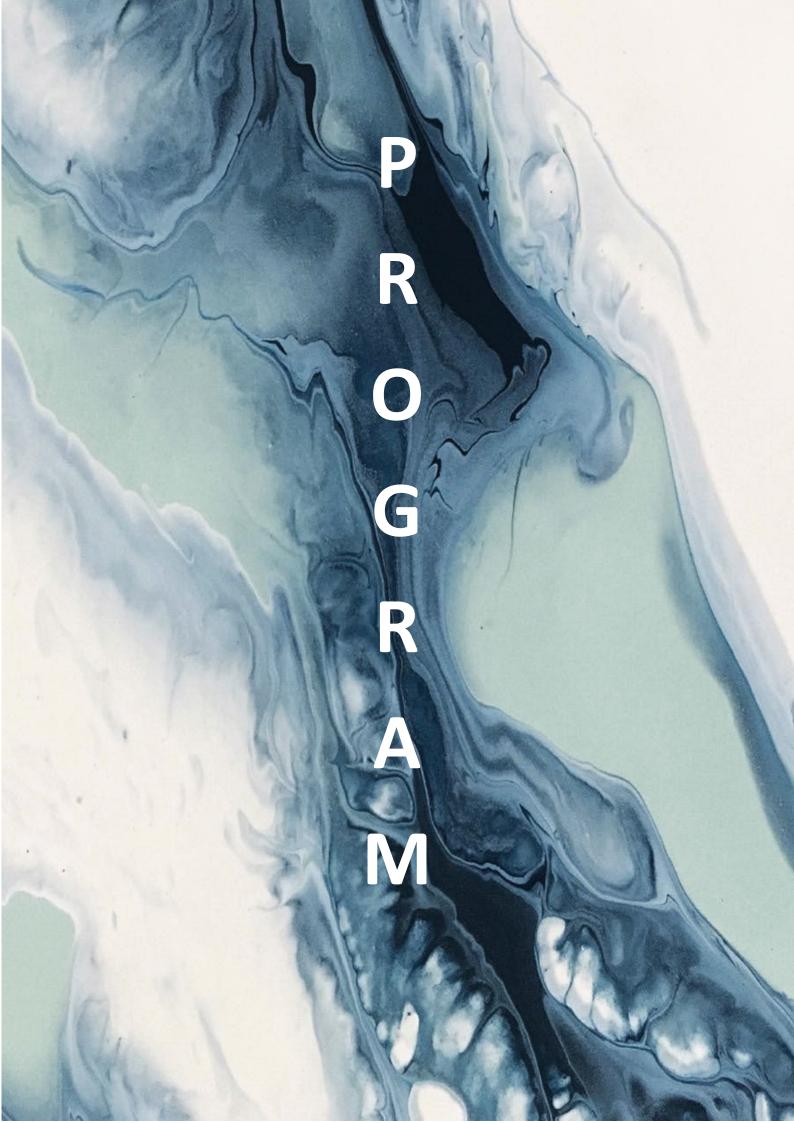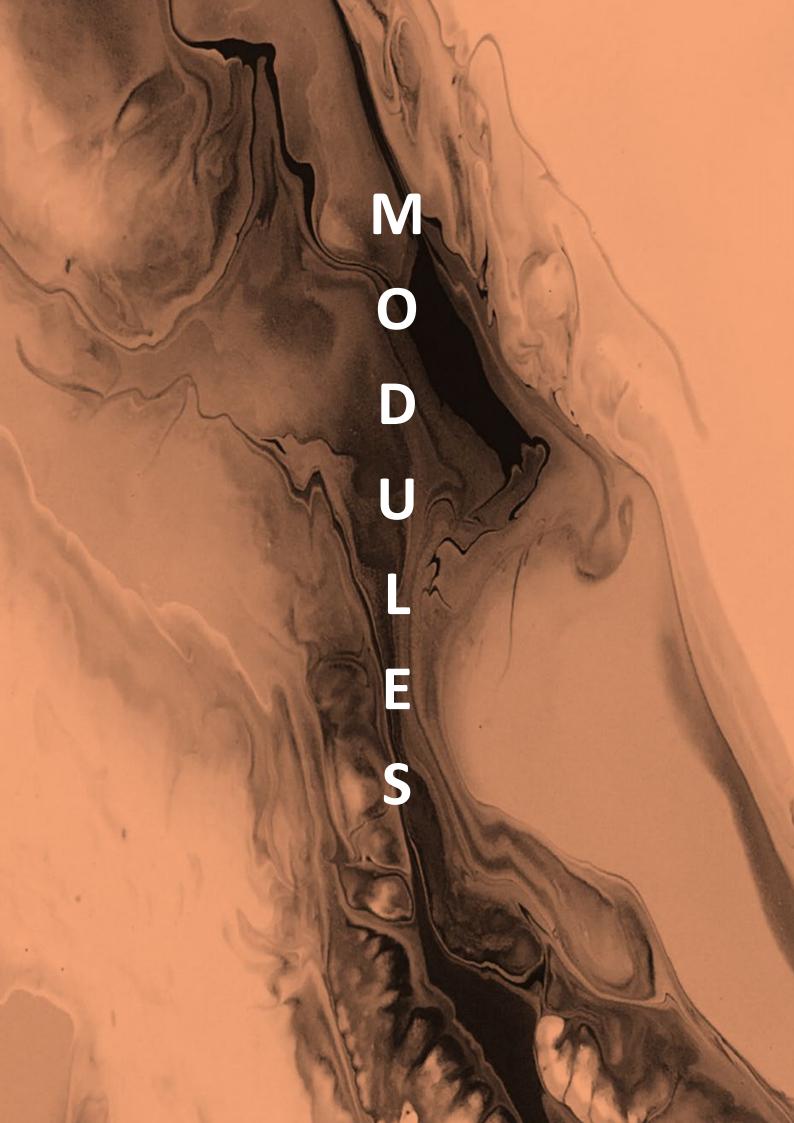# PASSWORD MANAGER

BY:

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INTRODUCTION

Password Manager is a program that can manage the unlimited number of passwords of various users. Each user only has to remember his/her single unique ID and password that will give him access to all of his passwords. This menu driven program helps the user to add, change, delete and view the passwords without any hassle. It can also tell if the user's entered password is weak or strong and can suggest a strong password as per user's wish. The user can simply enter the name of domain whose password he wants to see or delete.

PROGRAM

```python
#main menu
import mysql.connector as mc
con=mc.connect(host="localhost", user="root", password="200913")
cur=con.cursor()
s="use passdata"
cur.execute(s)
print('WELCOME')
while True:
    print('     MENU:     ')
    print('Press 1: To create an account')
    print('Press 2: LOGIN')
    print('Press 3: To exit')
    OPTION=int(input('Enter the desired option'))
    if OPTION==1:
        print('Thanks for choosing our services')
        userid=int(input('Enter a unique userid'))
        username=input('Enter the Account Username')
        password=input('Enter the Account Password')
        pswd=input('Please re-enter the password')
        s='insert into logintable values({},"{}","{}")'.format(userid,username,password)
        cur.execute(s)
        con.commit()
        con.close()
        print(' ')
        print('NOTE:   Remember the filled details for accessing the account in future')
        print('Congratulations! Your account is successfully made')
        break
    elif OPTION==2:
        print('Welcome Back')
        userid=int(input('Enter your unique userid'))
        password=input('Enter the password')
        pass1='select Password from logintable where UserID={}'.format(userid)
        cur.execute(pass1)
        d=cur.fetchall()
        print(' ')
        if password==d[0][0]:
            s='create view v1 as select*from passtable where userid={}'.format(userid)
            cur.execute(s)
            print('     MENU:     ')
            print('To add a password press 1')
            print('To change the password press 2')
            print('To delete a password press 3')
            print('To show the password press 4')
            print('To exit to Main Menu press 5')
            print(' ')
            import PASSWORD
            while True:
                CHOICE=int(input('Please enter your choice:'))
                if CHOICE==1:
                    PASSWORD.add_pass()
                elif CHOICE==2:
                    PASSWORD.edit_pass()
                elif CHOICE==3:
                    PASSWORD.delete_pass()
                elif CHOICE==4:
                    PASSWORD.view_pass()
                elif CHOICE==5:
                    m='drop view v1'
                    cur.execute(m)
                    break
        else:
            print(' ')
            print('password does not match')
    elif OPTION==3:
        exitapp=input('Are you sure you want to exit')
        if exitapp=='yes':
            break
        else:
            continue
```

MODULES

1)ADDING A PASSWORD:

```python
#
#adding a new password
#
def add_pass():
    dname=input("please enter the name of domain")
    uname=input("please enter the username")
    uid=input('please enter the unique userid')
    import mysql.connector as mc
    con=mc.connect(host="localhost", user="root", password="200913")
    cur=con.cursor()
    s="use passdata"
    cur.execute(s)
    print("press 1:user added password, 2:auto generated password")
    x=int(input("please enter your choice"))
    if x==1:
        n=0
        while n==0:
            pass1=input('enter the password')
            a,b=0,0
            for i in range(0,len(pass1)):
                if pass1[i].isnumeric():
                    a+=1
                elif pass1[i] in ['!','@','$','%','^','&','*','/','?',':',';']:
                    b+=1
            if len(pass1)<=7:
                print('Password must be of 8 characters')
                continue
            elif a<2:
                print('Weak Password','Password must contain atleast two digits')
                continue
            elif b<1:
                print('Weak Password')
                print('Password must contain atleast one special character out of the following')
                print(['!','@','$','%','^','&','*','/','?',':',';'])
                continue
            else:
                print('strong password')
                n=1
        pass2=input("please re-enter the password")
        if pass1==pass2:
            s1="insert into passtable values(%s,%s,%s,%s)"
            cur.execute(s1,(dname,uname,pass1,uid))
            con.commit()
            con.close()
            print("the password is successfully added")
        else:
            print("the passwords don't match please try again")
    elif x==2:
        pass3=""
        import random as r
        pass3+=chr(r.randint(65,90))
        pass3+=chr(r.randint(48,57))
        pass3+=chr(r.randint(97,122))
        pass3+=chr(r.randint(97,122))
        pass3+=chr(r.randint(97,122))
        pass3+=chr(r.randint(97,122))
        pass3+=chr(r.randint(97,122))
        pass3+=chr(r.randint(97,122))
        print("your new password is",pass3)
        s1="insert into passtable values(%s,%s,%s,%s)"
        cur.execute(s1,(dname,uname,pass3,uid))
        con.commit()
        con.close()
        print("the password is successfully added")
```
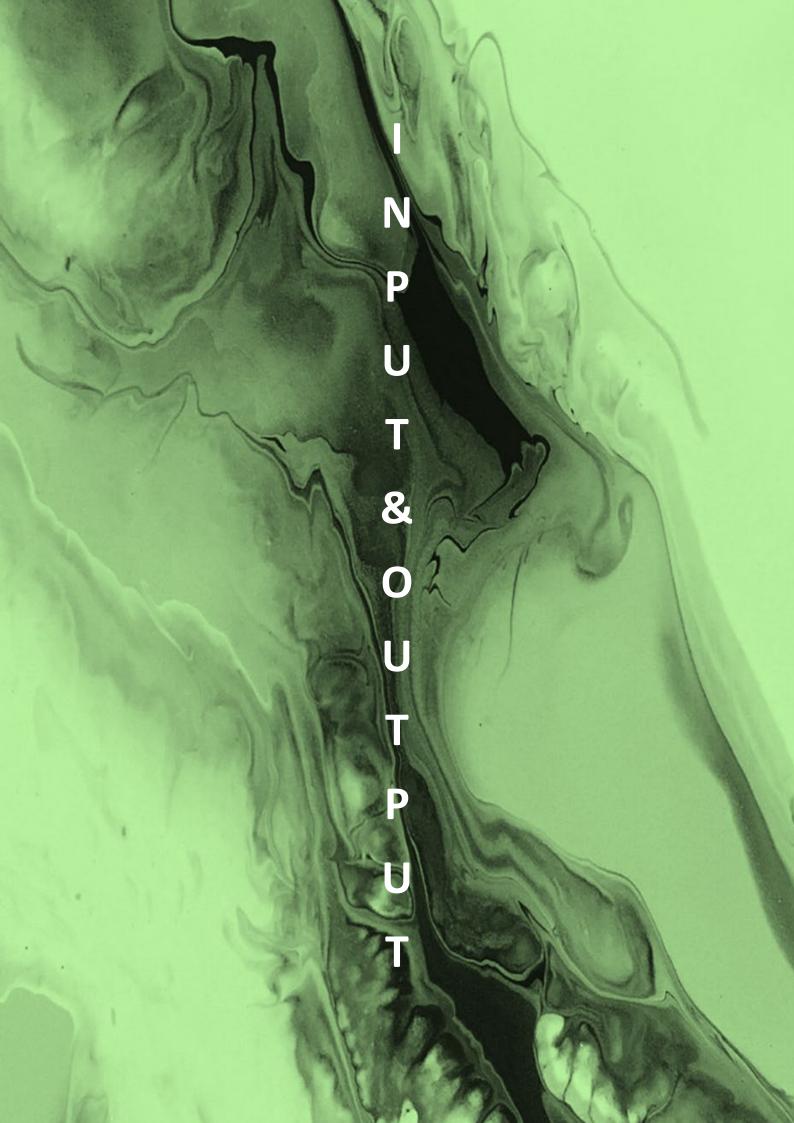
2)EDITING A PASSWORD:

```python
#
#changing your password
#
def edit_pass():

    uname=input('Please enter your username:')
    import mysql.connector as mc
    con=mc.connect(host="localhost", user="root", password="200913")
    cur=con.cursor()
    s="use passdata"
    cur.execute(s)
    print("Press 1:User added password, 2:Auto-generated password")
    x=int(input("Please enter your choice:"))
    if x==1:
        n=0
        while n==0:
            pass1=input('Enter the password:')
            a,b=0,0
            for i in range(0,len(pass1)):
                if pass1[i].isnumeric():
                    a+=1
                elif pass1[i] in ['!','@','$','%','^','&','*','/','?',':',';']:
                    b+=1
            if len(pass1)<=7:
                print('Password must be of 8 characters')
                continue
            elif a<2:
                print('Weak Password','Password must contain atleast two digits')
                continue
            elif b<1:
                print('Weak Password')
                print('Password must contain atleast one special character out of the following
                print(['!','@','$','%','^','&','*','/','?',':',';'])
                continue
            else:
                print('Strong Password')
                n=1
        pass2=input("Please re-enter the password:")
        if pass1==pass2:
            s1="update passtable set password='{}' where username='{}'".format(pass1,uname)
            cur.execute(s1)
            con.commit()
            con.close()
            print("The Password is successfully changed")
        else:
            print("The Passwords don't match please try again")
    elif x==2:
        pass3=''
        import random as r
        pass3+=chr(r.randint(65,90))
        pass3+=chr(r.randint(48,57))
        pass3+=chr(r.randint(97,122))
        pass3+=chr(r.randint(97,122))
        pass3+=chr(r.randint(97,122))
        pass3+=chr(r.randint(97,122))
        pass3+=chr(r.randint(97,122))
        pass3+=chr(r.randint(97,122))
        print("your new password is",pass3)
        pass4=input('Re-enter the password: ')
        s1="update passtable set password='{}' where username='{}'".format(pass4,uname)
        cur.execute(s1)
        con.commit()
        con.close()
        print("The password is successfully changed")
```

3)DELETING A PASSWORD:

```python
#
#deleting a password
#
def delete_pass():
    dname=input("please enter the name of domain")
    uid=input("please enter unique userid")
    import mysql.connector as mc
    con=mc.connect(host="localhost", user="root", password="200913")
    cur=con.cursor()
    s="use passdata"
    cur.execute(s)
    s1="select * from passtable where Domain_name='{}' and UserID={}".format(dname,uid)
    cur.execute(s1)
    d=cur.fetchall()
    if len(d)>=1: #password exists
        s2="delete from passtable where Domain_name='{}' and UserID={}".format(dname,uid)
        cur.execute(s2)
        con.commit()
        con.close()
        print("your password is successfully deleted")
    else:
        print("the passwords doesn't exist")
```

4)VIEWING A PASSWORD:

```python
#
#viewing a password
#
def view_pass():
    dname=input("please enter the name of domain")
    uid=input("please enter the unique userid")
    import mysql.connector as mc
    con=mc.connect(host="localhost", user="root", password="200913")
    cur=con.cursor()
    s="use passdata"
    cur.execute(s)
    s1="select * from v1 where Domain_name='{}' and UserId={}".format(dname,uid)
    cur.execute(s1)
    d=cur.fetchall()
    if len(d)>=1:
        print("the password is",d)
    else:
        print("the password doesn't exist")
```

INPUT & OUTPUT

FUNCTIONS RELATED TO LOGINTABLE

1) ADD A NEW USER

- **Before adding a user**

```
mysql> select*from logintable;
+---------+---------------+----------+
| UserID  | Username      | Password |
+---------+---------------+----------+
|     101 | Vaibhav Gupta | Cr7ruler |
+---------+---------------+----------+
```

- **Input**

```
WELCOME
      MENU:
Press 1: To create an account
Press 2: LOGIN
Press 3: To exit
Enter the desired option1
Thanks for choosing our services
Enter a unique userid102
Enter the Account UsernameSaksham Mehta
Enter the Account PasswordIjklmn0
Please re-enter the passwordIjklmn0

NOTE:   Remember the filled details for accessing the account in future
Congratulations! Your account is successfully made
```

- **After adding a user**

```
mysql> select*from logintable;
+---------+---------------+----------+
| UserID  | Username      | Password |
+---------+---------------+----------+
|     101 | Vaibhav Gupta | Cr7ruler |
|     102 | Saksham Mehta | Ijklmn0  |
+---------+---------------+----------+
```

2) LOGIN FOR AN EXISTING USER

```
WELCOME
      MENU:
Press 1: To create an account
Press 2: LOGIN
Press 3: To exit
Enter the desired option2
Welcome Back
Enter your unique userid101
Enter the passwordCr7ruler

      MENU:
To add a password press 1
To change the password press 2
To delete a password press 3
To show the password press 4
To exit to Main Menu press 5

Please enter your choice:5
      MENU:
Press 1: To create an account
Press 2: LOGIN
Press 3: To exit
Enter the desired option3
Are you sure you want to exityes
```

FUNCTIONS RELATED TO PASSTABLE

1) PASSWORD ADDED MANUALLY:

- **Before adding the password**

```
mysql> SELECT*FROM passtable;
+-------------+----------------------------+-----------+--------+
| Domain_name | Username                   | Password  | UserId |
+-------------+----------------------------+-----------+--------+
| Google      | vaibhavgupta2002@gmail.com | P0pysxua  |    101 |
| Google      | mehta$aksh@gmail.com       | L7jkgxgg  |    102 |
| Facebook    | Vaibhavvv.Gupta02          | 20atpug%  |    101 |
| Snapchat    | Smehta07                   | K5drmcfl  |    102 |
| Snapchat    | Vaibhav02gupt@             | H3ropynf  |    101 |
| Instagram   | Vaibh@vGuptaaa02           | L2hqgrlh  |    101 |
| Instagram   | mehta@saksham_.            | $ecret12  |    102 |
+-------------+----------------------------+-----------+--------+
7 rows in set (0.00 sec)
```

- **Input**

```
WELCOME
      MENU:
Press 1: To create an account
Press 2: LOGIN
Press 3: To exit
Enter the desired option2
Welcome Back
Enter your unique userid102
Enter the passwordIjklmn0

      MENU:
To add a password press 1
To change the password press 2
To delete a password press 3
To show the password press 4
To exit to Main Menu press 5

Please enter your choice:1
please enter the name of domainFacebook
please enter the usernameSakshammeht@_.
please enter the unique userid102
press 1:user added password, 2:auto generated password
please enter your choice1
enter the passwordsaksham12%
strong password
please re-enter the passwordsaksham12%
the password is successfully added
```

- **After adding the password**

```
+-------------+----------------------------+-----------+--------+
| Domain_name | Username                   | Password  | UserId |
+-------------+----------------------------+-----------+--------+
| Google      | vaibhavgupta2002@gmail.com | P0pysxua  |    101 |
| Google      | mehta$aksh@gmail.com       | L7jkgxgg  |    102 |
| Facebook    | Vaibhavvv.Gupta02          | 20atpug%  |    101 |
| Snapchat    | Smehta07                   | K5drmcfl  |    102 |
| Snapchat    | Vaibhav02gupt@             | H3ropynf  |    101 |
| Instagram   | Vaibh@vGuptaaa02           | L2hqgrlh  |    101 |
| Instagram   | mehta@saksham_.            | $ecret12  |    102 |
| Facebook    | Sakshammeht@_.             | saksham12%|    102 |
+-------------+----------------------------+-----------+--------+
```

2) ADDING AUTO- GENERATED PASSWORD:

- **Before adding a password**

```
+------------+------------------------------+------------+--------+
| Domain_name | Username                    | Password   | UserId |
+------------+------------------------------+------------+--------+
| Google     | vaibhavgupta2002@gmail.com  | P0pysxua   |    101 |
| Google     | mehta$aksh@gmail.com        | L7jkgxgg   |    102 |
| Facebook   | Vaibhavvv.Gupta02           | 20atpug%   |    101 |
| Snapchat   | Smehta07                    | K5drmcfl   |    102 |
| Snapchat   | Vaibhav02gupt@              | H3ropynf   |    101 |
| Instagram  | Vaibh@vGuptaaa02            | L2hqgrlh   |    101 |
| Instagram  | mehta@saksham_.             | $ecret12   |    102 |
| Facebook   | Sakshammeht@_.              | saksham12% |    102 |
+------------+------------------------------+------------+--------+
```

- **Input**

```
     MENU:
Press 1: To create an account
Press 2: LOGIN
Press 3: To exit
Enter the desired option2
Welcome Back
Enter your unique userid101
Enter the passwordCr7ruler

     MENU:
To add a password press 1
To change the password press 2
To delete a password press 3
To show the password press 4
To exit to Main Menu press 5

Please enter your choice:1
please enter the name of domainYahoo
please enter the usernamevaibguptaaa@yahoo.com
please enter the unique userid101
press 1:user added password, 2:auto generated password
please enter your choice2
your new password is C0pttlew
the password is successfully added
```

- **After adding the password**

```
mysql> select*from passtable;
+------------+------------------------------+------------+--------+
| Domain_name | Username                    | Password   | UserId |
+------------+------------------------------+------------+--------+
| Google     | vaibhavgupta2002@gmail.com  | P0pysxua   |    101 |
| Google     | mehta$aksh@gmail.com        | L7jkgxgg   |    102 |
| Facebook   | Vaibhavvv.Gupta02           | 20atpug%   |    101 |
| Snapchat   | Smehta07                    | K5drmcfl   |    102 |
| Snapchat   | Vaibhav02gupt@              | H3ropynf   |    101 |
| Instagram  | Vaibh@vGuptaaa02            | L2hqgrlh   |    101 |
| Instagram  | mehta@saksham_.             | $ecret12   |    102 |
| Facebook   | Sakshammeht@_.              | saksham12% |    102 |
| Yahoo      | vaibguptaaa@yahoo.com       | C0pttlew   |    101 |
+------------+------------------------------+------------+--------+
```

3) CHANGING PASSWORD MANUALLY:

- **Before changing the password**

```
+--------------+-------------------------------+------------+--------+
| Domain_name  | Username                      | Password   | UserId |
+--------------+-------------------------------+------------+--------+
| Google       | vaibhavgupta2002@gmail.com    | P0pysxua   |    101 |
| Google       | mehta$aksh@gmail.com          | L7jkgxgg   |    102 |
| Facebook     | Vaibhavvv.Gupta02             | 20atpug%   |    101 |
| Snapchat     | Smehta07                      | K5drmcfl   |    102 |
| Snapchat     | Vaibhav02gupt@                | H3ropynf   |    101 |
| Instagram    | Vaibh@vGuptaaa02              | L2hqgrlh   |    101 |
| Instagram    | mehta@saksham_.               | $ecret12   |    102 |
| Facebook     | Sakshammeht@_.                | saksham12% |    102 |
| Yahoo        | vaibguptaaa@yahoo.com         | C0pttlew   |    101 |
+--------------+-------------------------------+------------+--------+
```

- **Input**

```
WELCOME
      MENU:
Press 1: To create an account
Press 2: LOGIN
Press 3: To exit
Enter the desired option2
Welcome Back
Enter your unique userid101
Enter the passwordCr7ruler

      MENU:
To add a password press 1
To change the password press 2
To delete a password press 3
To show the password press 4
To exit to Main Menu press 5

Please enter your choice:2
Please enter your username:Vaibhavvv.Gupta02
Press 1:User added password, 2:Auto-generated password
Please enter your choice:1
Enter the password:$ilverag200
Strong Password
Please re-enter the password:$ilverag200
The Password is successfully changed
```

- **After changing the password**

```
mysql> select*from passtable;
+--------------+-------------------------------+-------------+--------+
| Domain_name  | Username                      | Password    | UserId |
+--------------+-------------------------------+-------------+--------+
| Google       | vaibhavgupta2002@gmail.com    | P0pysxua    |    101 |
| Google       | mehta$aksh@gmail.com          | L7jkgxgg    |    102 |
| Facebook     | Vaibhavvv.Gupta02             | $ilverag200 |    101 |
| Snapchat     | Smehta07                      | K5drmcfl    |    102 |
| Snapchat     | Vaibhav02gupt@                | H3ropynf    |    101 |
| Instagram    | Vaibh@vGuptaaa02              | L2hqgrlh    |    101 |
| Instagram    | mehta@saksham_.               | $ecret12    |    102 |
| Facebook     | Sakshammeht@_.                | saksham12%  |    102 |
| Yahoo        | vaibguptaaa@yahoo.com         | C0pttlew    |    101 |
+--------------+-------------------------------+-------------+--------+
```

4) CHANGING AUTO-GENERATED PASSWORD:

- **Before changing the password**

```
mysql> select*from passtable;
+-------------+------------------------------+--------------+--------+
| Domain_name | Username                     | Password     | UserId |
+-------------+------------------------------+--------------+--------+
| Google      | vaibhavgupta2002@gmail.com   | P0pysxua     |    101 |
| Google      | mehta$aksh@gmail.com         | L7jkgxgg     |    102 |
| Facebook    | Vaibhavvv.Gupta02            | $ilverag200  |    101 |
| Snapchat    | Smehta07                     | K5drmcfl     |    102 |
| Snapchat    | Vaibhav02gupt@               | H3ropynf     |    101 |
| Instagram   | Vaibh@vGuptaaa02             | L2hqgrlh     |    101 |
| Instagram   | mehta@saksham_.              | $ecret12     |    102 |
| Facebook    | Sakshammeht@_.               | saksham12%   |    102 |
| Yahoo       | vaibguptaaa@yahoo.com        | C0pttlew     |    101 |
+-------------+------------------------------+--------------+--------+
```

- **Input**

```
WELCOME
     MENU:
Press 1: To create an account
Press 2: LOGIN
Press 3: To exit
Enter the desired option2
Welcome Back
Enter your unique userid101
Enter the passwordCr7ruler

     MENU:
To add a password press 1
To change the password press 2
To delete a password press 3
To show the password press 4
To exit to Main Menu press 5

Please enter your choice:2
Please enter your username:vaibhavgupta2002@gmail.com
Press 1:User added password, 2:Auto-generated password
Please enter your choice:2
your new password is P6ajrivl
Re-enter the password: P6ajrivl
The password is successfully changed
```

- **After changing the password**

```
mysql> select*from passtable;
+-------------+------------------------------+--------------+--------+
| Domain_name | Username                     | Password     | UserId |
+-------------+------------------------------+--------------+--------+
| Google      | vaibhavgupta2002@gmail.com   | P6ajrivl     |    101 |
| Google      | mehta$aksh@gmail.com         | L7jkgxgg     |    102 |
| Facebook    | Vaibhavvv.Gupta02            | $ilverag200  |    101 |
| Snapchat    | Smehta07                     | K5drmcfl     |    102 |
| Snapchat    | Vaibhav02gupt@               | H3ropynf     |    101 |
| Instagram   | Vaibh@vGuptaaa02             | L2hqgrlh     |    101 |
| Instagram   | mehta@saksham_.              | $ecret12     |    102 |
| Facebook    | Sakshammeht@_.               | saksham12%   |    102 |
| Yahoo       | vaibguptaaa@yahoo.com        | C0pttlew     |    101 |
+-------------+------------------------------+--------------+--------+
```

5) DELETING A PASSWORD:

- **Before deleting the password**

```
mysql> select*from passtable;
+-------------+---------------------------+-------------+--------+
| Domain_name | Username                  | Password    | UserId |
+-------------+---------------------------+-------------+--------+
| Google      | vaibhavgupta2002@gmail.com | P6ajrivl   |    101 |
| Google      | mehta$aksh@gmail.com      | L7jkgxgg    |    102 |
| Facebook    | Vaibhavvv.Gupta02         | $ilverag200 |    101 |
| Snapchat    | Smehta07                  | K5drmcfl    |    102 |
| Snapchat    | Vaibhav02gupt@            | H3ropynf    |    101 |
| Instagram   | Vaibh@vGuptaaa02          | L2hqgrlh    |    101 |
| Instagram   | mehta@saksham_.           | $ecret12    |    102 |
| Facebook    | Sakshammeht@_.            | saksham12%  |    102 |
| Yahoo       | vaibguptaaa@yahoo.com     | C0pttlew    |    101 |
+-------------+---------------------------+-------------+--------+
```

- **Input**

```
WELCOME
      MENU:
Press 1: To create an account
Press 2: LOGIN
Press 3: To exit
Enter the desired option2
Welcome Back
Enter your unique userid101
Enter the passwordCr7ruler

      MENU:
To add a password press 1
To change the password press 2
To delete a password press 3
To show the password press 4
To exit to Main Menu press 5

Please enter your choice:3
please enter the name of domainInstagram
please enter unique userid101
your password is successfully deleted
```

- **After deleting the password**

```
mysql> select*from passtable;
+-------------+---------------------------+-------------+--------+
| Domain_name | Username                  | Password    | UserId |
+-------------+---------------------------+-------------+--------+
| Google      | vaibhavgupta2002@gmail.com | P6ajrivl   |    101 |
| Google      | mehta$aksh@gmail.com      | L7jkgxgg    |    102 |
| Facebook    | Vaibhavvv.Gupta02         | $ilverag200 |    101 |
| Snapchat    | Smehta07                  | K5drmcfl    |    102 |
| Snapchat    | Vaibhav02gupt@            | H3ropynf    |    101 |
| Instagram   | mehta@saksham_.           | $ecret12    |    102 |
| Facebook    | Sakshammeht@_.            | saksham12%  |    102 |
| Yahoo       | vaibguptaaa@yahoo.com     | C0pttlew    |    101 |
+-------------+---------------------------+-------------+--------+
```

6) VIEWING A PASSWORD:

- **Input**

```
WELCOME
      MENU:
Press 1: To create an account
Press 2: LOGIN
Press 3: To exit
Enter the desired option2
Welcome Back
Enter your unique userid102
Enter the passwordIjklmn0

      MENU:
To add a password press 1
To change the password press 2
To delete a password press 3
To show the password press 4
To exit to Main Menu press 5

Please enter your choice:4
please enter the name of domainFacebook
please enter the unique userid102
the password is [('Facebook', 'Sakshammeht@_.', 'saksham12%', 102)]
```