REPORT FOR ATM MACHNE

AS A PROJECT WORK FOR COURSE

PYTHON PROGRAMMING(INT213)

NAME : M.P.DHANVEER PRAKASH

REGISTRATION NUMBER :12003145

NAME :SPARSH SHARMA

REGISTRATION NUMBER :12001521

PROGRAM : INTEGRATED B.TECH-M.TECH CSE

SEMESTER : 3RD

SCHOOL ENGINEERING :SCHOOL OF COMPUTER SCIENCE AND

NAME OF UNIVERSITY :LOVELY PROFESSIONAL UNIVERSITY

DATE OF SUBMISSION :20TH NOVEMBER 2021

LOVELY PROFESSIONAL UNIVERSITY

JALANDHAR, PUNJAB, INDIA.

ATM MACHINE

ABSTRACT: -

Automated Teller Machine (ATM) is an electronic telecommunications device, which enables customers to perform banking without the need for direct interaction with bank staff. For this, every account holder must have a unique id card for the individual account having a unique pin. On the absence of this card, whatever be the adverse situation the use of this ATM service is not permitted. So, an Internet of Things and Computer Vision based Smart ATM service is being proposed here, using Raspberry Pi microcontroller based embedded system, where each person will be their own identity, where Fingerprint, Face, OTP verifications are key features for security, which in turn reduces the issue of fraud transactions, fraud ATM cards, hence security issue gets resolved.

ACKNOWLEDGEMENT: -

I would like to thank our python teacher Ms. Ankita Wadhawan for her great inputs throughout the project.

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TEAM MEMBERS

M.P.DHANVEER PRAKASH

CONTRIBUTIONS:-

1.Coding(joined)

2.Report making

3.Testing

SPARSH SHARMA

CONTRIBUTIONS:-

1.Coding(joined)

2.Collection of data

3.Solving errors

4.Reference

CODE:-

```
import getpass
import string
import os
users = ['user1', 'user2', 'user3','user4', 'user5']
pins = ['1234', '1111', '2222','3333','4444']
amounts = [1000, 2000, 3000,5000,10000]
count = 0
while True:
user = input('\nENTER USER NAME: ')
user = user.lower()
if user in users:
if user == users[0]:
n = 0
```

```
elif user == users[1]:
n = 1
elif user == users[2]:

                    n = 2
elif user == users[3]:
n = 3
else:
n = 4
break
else:
print('INVALID USERNAME')
while count < 5:
pin = str(getpass.getpass('PLEASE ENTER PIN: '))
if pin.isdigit():
if user == 'user1':
if pin == pins[0]:
break
else:
```

```
count += 1
print('INVALID PIN')
print()


            if user == 'user2':
if pin == pins[1]:
break
else:
count += 1
print('INVALID PIN')
print()

if user == 'user3':
if pin == pins[2]:
break
else:
count += 1
print('INVALID PIN')
```

```
print()
if user == 'user4':
if pin == pins[3]:
break
else:
count += 1
print('INVALID PIN')
print()
if user == 'user5':
if pin == pins[4]:
break
else:
count += 1
print('INVALID PIN')
print()
else:
print('PIN CONSISTS OF 4 DIGITS')
count += 1
```

```
if count == 5:
print('3 UNSUCCESFUL PIN ATTEMPTS, EXITING')
print('!!!!!YOUR CARD HAS BEEN LOCKED!!!!!')
exit()

print('LOGIN SUCCESFUL, CONTINUE')

print()

print(str.capitalize(users[n]), 'welcome to ATM')

print('----------ATM SYSTEM----------')
while True:
response = input('SELECT FROM FOLLOWING OPTIONS: \nStatement_(S) \nWithdraw_(W) \nChange PIN(P) \nQuit___(Q) \n: ').lower()
valid_responses = ['s', 'w','p', 'q']
response = response.lower()
if response == 's':
```

```
print(str.capitalize(users[n]), 'YOU HAVE ', amounts[n],'RUPEES ON YOUR ACCOUNT.')


elif response == 'w':

                cash_out = int(input('ENTER AMOUNT YOU WOULD LIKE TO WITHDRAW: '))
if cash_out%100 != 0:
print('AMOUNT YOU WANT TO WITHDRAW MUST TO MATCH 100 RUPEE NOTES')
elif cash_out > amounts[n]:
print('YOU HAVE INSUFFICIENT BALANCE')
else:
amounts[n] = amounts[n] - cash_out
print('YOUR NEW BALANCE IS: ', amounts[n], 'RUPEE')


elif response == 'p':
new_pin = str(getpass.getpass('ENTER A NEW PIN: '))
if new_pin.isdigit() and new_pin != pins[n] and len(new_pin) == 4:
```

```
new_ppin = str(getpass.getpass('CONFIRM NEW PIN: '))
if new_ppin != new_pin:
print('PIN MISMATCH')



                    else:
pins[n] = new_pin
print('NEW PIN SAVED')
else:
print('   NEW PIN MUST CONSIST OF 4 DIGITS \nAND MUST BE DIFFERENT TO PREVIOUS PIN')
elif response == 'q':
   print('THANKYOU FOR BANKING WITH US')
   exit()
else:
print('RESPONSE NOT VALID')
```

Code Explanation:-

As this project is a simple simulated atm we have constrained the user limit and the options available in original atm such as:

1.Select the type of account

2.Fast cash

3.Receipt and some more

But in this project, we were able to add the most important options whis is used on mandatory basis such as:

1.Statement

2.Withdraw

3.Change pin

4.Quit

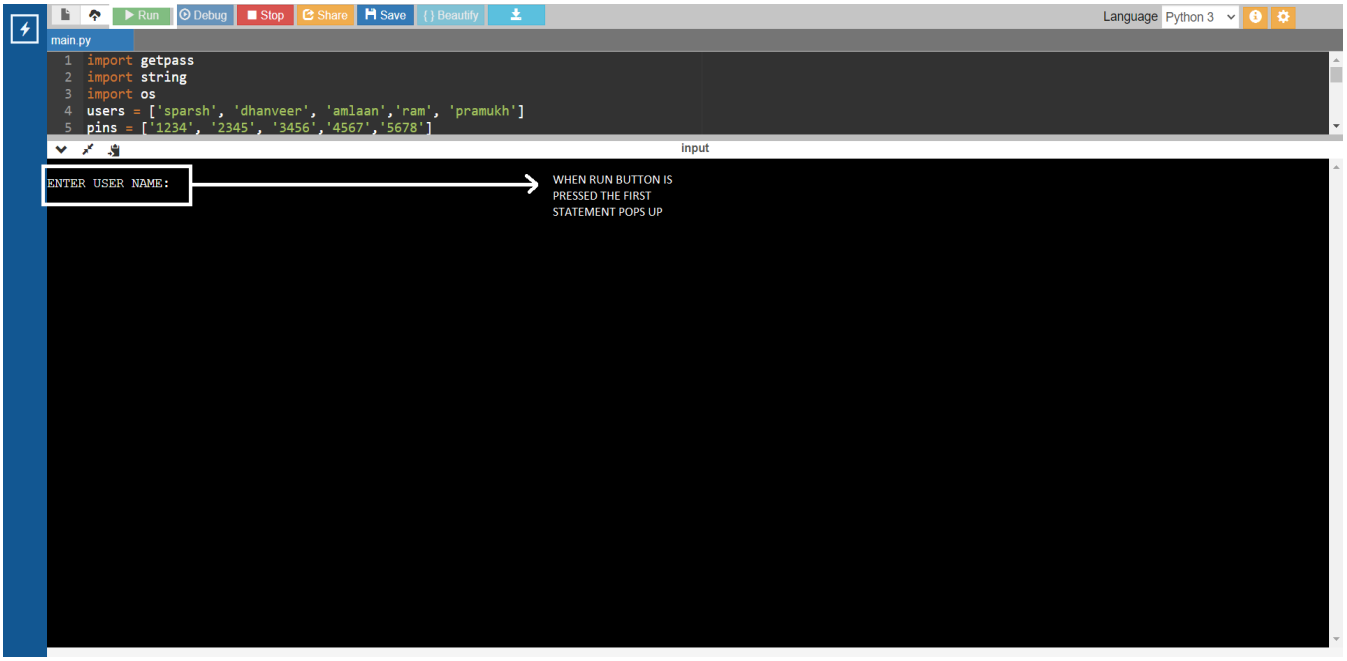
Five users were given with five different pins to check the test case and also with five different fixed amounts on the account for ex. (user1 has Rs.1000 as balance in the account for which the pin has been set as 1234). If the pin entered by the user doesn’t matches with fixed pin, then the screen displays “INVALID PIN” and also has a limit of 3 possible incorrect pins or else the “YOUR CARD HAS BEEN BLOCKED” will get displays and the program gets terminated/exit. If the entered pin is correct the program moves forward asking 4 options of 1. Statement,2. Withdraw 3. Change pin, ,4. Quit. If the user presses “s” on the screen then the fixed balance amount gets displayed whereas the program keeps on running to make the user convenient to make other transaction. Same as if the user opts “w” then the amount which the user wants to withdraw will get deducted and the remaining amount gets displayed. Then there's an option of changing the pin which works until the code gets terminated and finally the last option is quit due to which the program gets ended up there instead of keep on running.

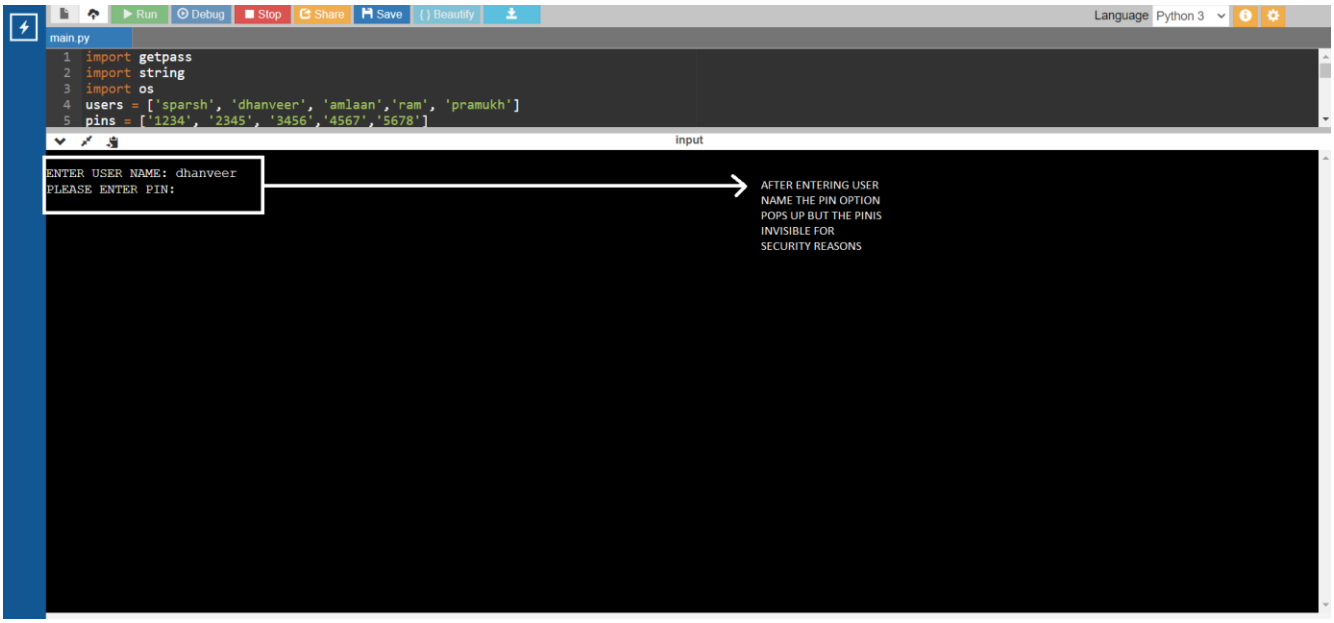
GITHUB LINK:-

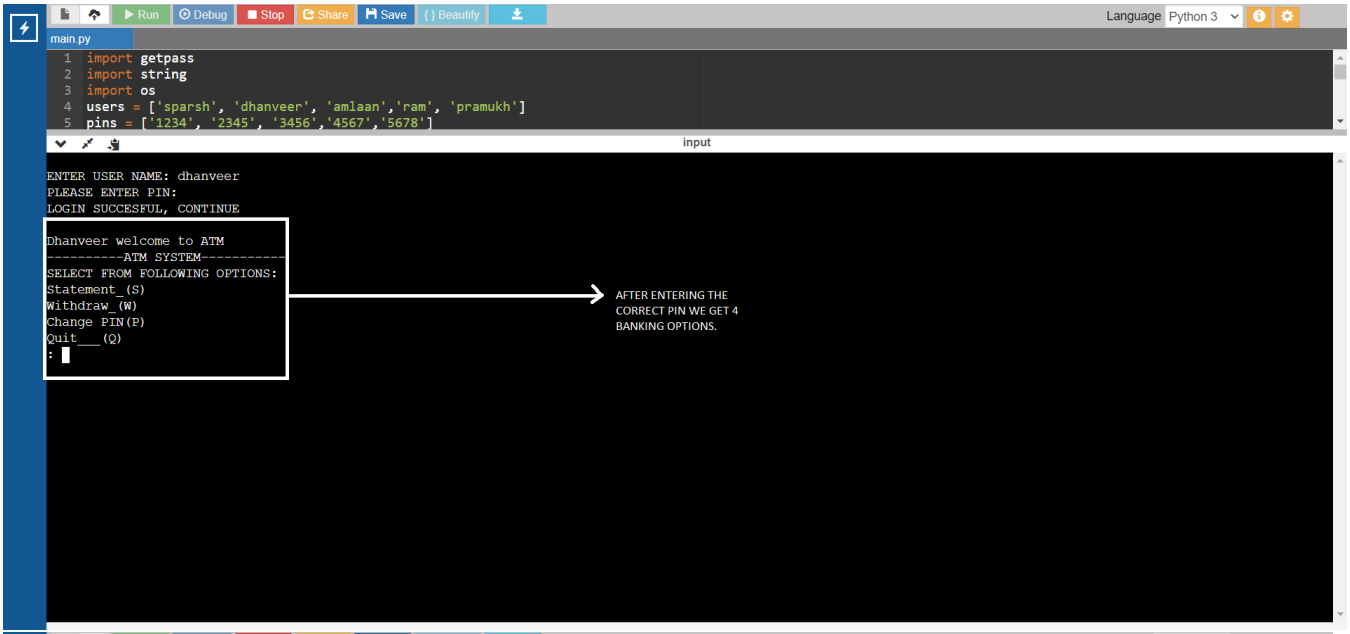
DHANVEER: https://github.com/mpdhanveer05-prakash/ATM-PYTHON

SPARSH: https://github.com/SparshSharm0210/Automated-Teller-Machine.git

SCREENSHOTS OF OUTPUT:-




Run
Debug
Stop
Share
Save
{ } Beautify
Language
Python 3
main.py
1 import getpass
2 import string
3 import os
4 users = ['sparsh', 'dhanveer', 'amlaan','ram', 'pramukh']
5 pins = ['1234', '2345', '3456','4567','5678']
input
ENTER USER NAME: dhanveer
PLEASE ENTER PIN:
AFTER ENTERING USER
NAME THE PIN OPTION
POPS UP BUT THE PINIS
INVISIBLE FOR
SECURITY REASONS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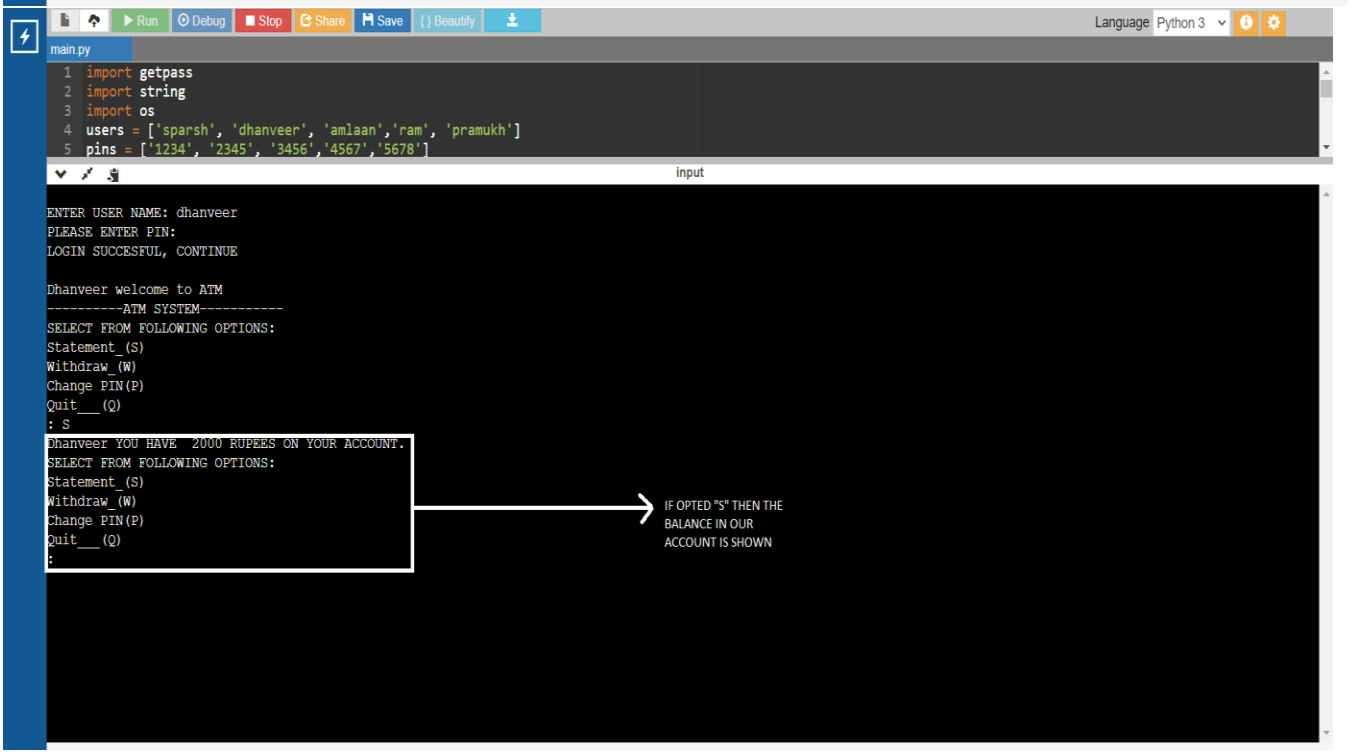
1 import getpass
2 import string
3 import os
4 users = ['sparsh', 'dhanveer', 'amlaan','ram', 'pramukh']
5 pins = ['1234', '2345', '3456','4567','5678']
input
ENTER USER NAME: dhanveer
PLEASE ENTER PIN:
LOGIN SUCCESFUL, CONTINUE
Dhanveer welcome to ATM
----------ATM SYSTEM----------
SELECT FROM FOLLOWING OPTIONS:
Statement_(S)
Withdraw_(W)
Change PIN(P)
Quit___(Q)
:
AFTER ENTERING THE CORRECT PIN WE GET 4 BANKING OPTIONS.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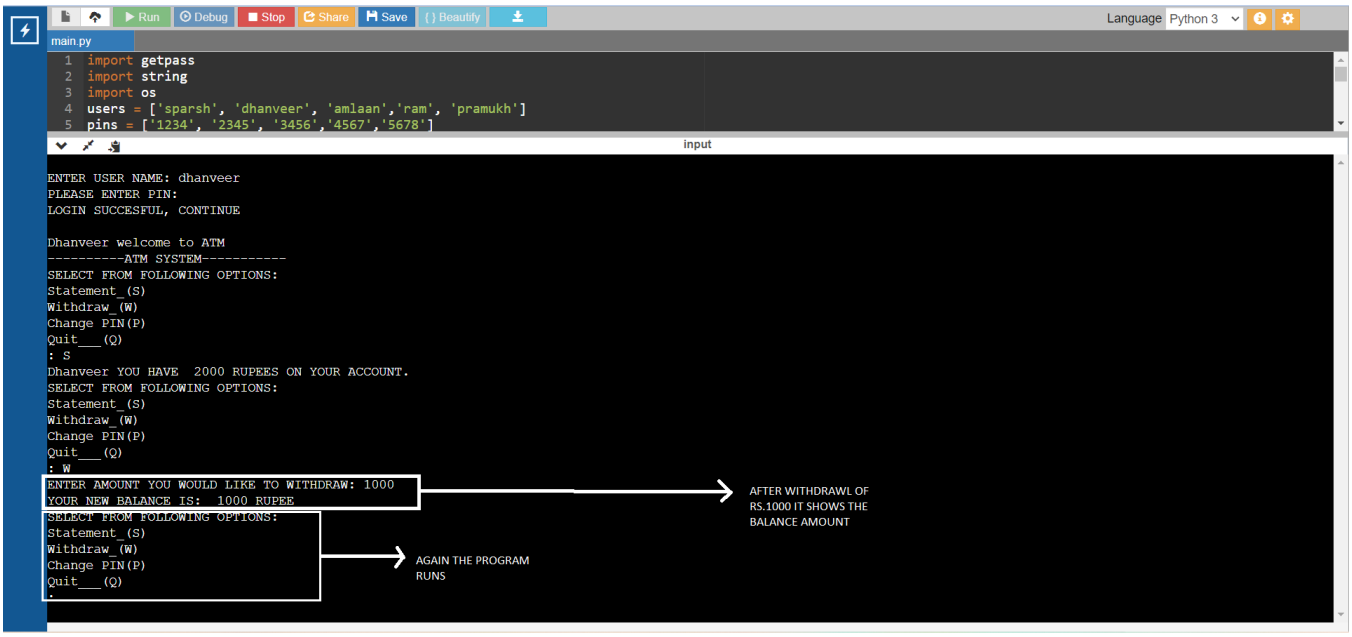
3 import os
4 users = ['sparsh', 'dhanveer', 'amlaan','ram', 'pramukh']
5 pins = ['1234', '2345', '3456','4567','5678']
input
ENTER USER NAME: dhanveer
PLEASE ENTER PIN:
LOGIN SUCCESFUL, CONTINUE
Dhanveer welcome to ATM
----------ATM SYSTEM----------
SELECT FROM FOLLOWING OPTIONS:
Statement_(S)
Withdraw_(W)
Change PIN(P)
Quit___(Q)
: S
Dhanveer YOU HAVE 2000 RUPEES ON YOUR ACCOUNT.
SELECT FROM FOLLOWING OPTIONS:
Statement_(S)
Withdraw_(W)
Change PIN(P)
Quit___(Q)
:
IF OPTED "S" THEN THE BALANCE IN OUR ACCOUNT IS SHOWN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Python 3
main.py
1 import getpass
2 import string
3 import os
4 users = ['sparsh', 'dhanveer', 'amlaan','ram', 'pramukh']
5 pins = ['1234', '2345', '3456','4567','5678']
input
ENTER USER NAME: dhanveer
PLEASE ENTER PIN:
LOGIN SUCCESFUL, CONTINUE
Dhanveer welcome to ATM
----------ATM SYSTEM----------
SELECT FROM FOLLOWING OPTIONS:
Statement_(S)
Withdraw_(W)
Change PIN(P)
Quit___(Q)
: S
Dhanveer YOU HAVE 2000 RUPEES ON YOUR ACCOUNT.
SELECT FROM FOLLOWING OPTIONS:
Statement_(S)
Withdraw_(W)
Change PIN(P)
Quit___(Q)
: W
ENTER AMOUNT YOU WOULD LIKE TO WITHDRAW: 1000
YOUR NEW BALANCE IS: 1000 RUPEE
SELECT FROM FOLLOWING OPTIONS:
Statement_(S)
Withdraw_(W)
Change PIN(P)
Quit___(Q)
:
AFTER WITHDRAWL OF RS.1000 IT SHOWS THE BALANCE AMOUNT
AGAIN THE PROGRAM RUNS


Run
Debug
Stop
Share
Save
{ } Beautify
Language
Python 3
main.py
1 import getpass
2 import string
3 import os
4 users = ['sparsh', 'dhanveer', 'amlaan','ram', 'pramukh']
5 pins = ['1234', '2345', '3456','4567','5678']
input
Statement_(S)
Withdraw_(W)
Change PIN(P)
Quit___(Q)
: S
Dhanveer YOU HAVE 2000 RUPEES ON YOUR ACCOUNT.
SELECT FROM FOLLOWING OPTIONS:
Statement_(S)
Withdraw_(W)
Change PIN(P)
Quit___(Q)
: W
ENTER AMOUNT YOU WOULD LIKE TO WITHDRAW: 1000
YOUR NEW BALANCE IS: 1000 RUPEE
SELECT FROM FOLLOWING OPTIONS:
Statement_(S)
Withdraw_(W)
Change PIN(P)
Quit___(Q)
: P
ENTER A NEW PIN:
CONFIRM NEW PIN:
NEW PIN SAVED
SELECT FROM FOLLOWING OPTIONS:
Statement_(S)
Withdraw_(W)
Change PIN(P)
Quit___(Q)
:
IF OPTED "P" THE WE CAN CHANGE THE PIN.PIN IN NOT VISIBLE DUE TO SECURITY REASONS.BUT THE INPUT WILL BE SAVED.

Run | Debug | Stop | Share | Save | { } Beautify | Language: Python 3

main.py

```
1 import getpass
2 import string
3 import os
4 users = ['sparsh', 'dhanveer', 'amlaan','ram', 'pramukh']
5 pins = ['1234', '2345', '3456','4567','5678']
```

input

```
Dhanveer YOU HAVE  2000 RUPEES ON YOUR ACCOUNT.
SELECT FROM FOLLOWING OPTIONS:
Statement_(S)
Withdraw_(W)
Change PIN(P)
Quit___(Q)
: W
ENTER AMOUNT YOU WOULD LIKE TO WITHDRAW: 1000
YOUR NEW BALANCE IS:  1000 RUPEE
SELECT FROM FOLLOWING OPTIONS:
Statement_(S)
Withdraw_(W)
Change PIN(P)
Quit___(Q)
: P
ENTER A NEW PIN:
CONFIRM NEW PIN:
NEW PIN SAVED
SELECT FROM FOLLOWING OPTIONS:
Statement_(S)
Withdraw_(W)
Change PIN(P)
Quit___(Q)
: Q
THANKYOU FOR BANKING WITH US


...Program finished with exit code 0
Press ENTER to exit console.
```

IF WE OPT "Q" THE PROGRAM GETS ENDED.

input

```
ENTER USER NAME: dhanveer
PLEASE ENTER PIN:
LOGIN SUCCESFUL, CONTINUE

Dhanveer welcome to ATM
----------ATM SYSTEM----------
SELECT FROM FOLLOWING OPTIONS:
Statement_(S)
Withdraw_(W)
Change PIN(P)
Quit___(Q)
: S
Dhanveer YOU HAVE  2000 RUPEES ON YOUR ACCOUNT.
SELECT FROM FOLLOWING OPTIONS:
Statement_(S)
Withdraw_(W)
Change PIN(P)
Quit___(Q)
: W
ENTER AMOUNT YOU WOULD LIKE TO WITHDRAW: 1000
YOUR NEW BALANCE IS:  1000 RUPEE
SELECT FROM FOLLOWING OPTIONS:
Statement_(S)
Withdraw_(W)
Change PIN(P)
Quit___(Q)
: P
ENTER A NEW PIN:
CONFIRM NEW PIN:
NEW PIN SAVED
SELECT FROM FOLLOWING OPTIONS:
Statement_(S)
Withdraw_(W)
Change PIN(P)
Quit___(Q)
: Q
THANKYOU FOR BANKING WITH US


...Program finished with exit code 0
Press ENTER to exit console.
```

REFERENCE:-

1.https://t.me/Curious_Coder

2. https://www.geeksforgeeks.org/

3.GITHUB

4.GOOGLE

5.YOUTUBE