```python
credentials = {}
users_db = {}
passbook = {}
nested_t = {}
import datetime

print("~" * 7, "Welcome to WsCube Bank", "~" * 7)
print("\nHow can we help you today?")

while True:
    print("""\n
1. Open an Account
2. View Account Details
3. Perform Transactins (Withdraw/Deposite/Transfer)
4. Exit
\n""")
```

```python
choice = int(input("enter your choice between 1 to 4: "))

if choice == 1:
    fname = input("Enter First Name: ")
    lname = input("Enter Last Name: ")
    pancard = input("Enter Pan card Number: ")
    if pancard in users_db.keys():
        print("Your account already exist!")
        print("Try Again")
        break

    import random
    account_number = "11112222" #constant code for the branch
    for i in range(1,4):
        a = random.randint(0,9)
        account_number = account_number + str(a)
    account_type = input("Which type of account would you like to open (Current/Savings): ")
    balance = int(input("How much amount do you wish to deposit? "))
```

```python
username = fname
for i in range(2):
    a = random.randint(0,9)
    username = username + str(a)

password = ""

for i in range(4):
    a = random.randint(0,9)
    password = password + str(a)

print("Your Assigned username is", username)
print("Your Assigned password is", password)
print("Accout Number: ", account_number)
print("Account Type: ", account_type)
print("Your Initial balance is Rs.", balance)
print()

credentials[username] = password
users_db[pancard] = [fname, lname, account_number, account_type, balance]
```

```python
elif choice == 2:
    un = input("enter username: ")
    ps = input("enter password: ")
    pc = input("enter pancard: ")
    if un in credentials.keys() and ps == credentials[un] and pc in users_db.keys():
        print("Your Account Details are: ")
        print("Account Number: ",users_db[pc][2])
        print("Account Holders Name: ", users_db[pc][0], users_db[pc][1])
        print("Account Type: ",users_db[pc][-2])
        print("Total Balance is: ",users_db[pc][-1])

    else:
        print("This account does not exists try again!")
```

```python
elif choice == 3:
    un = input("enter username: ")
    ps = input("enter password: ")
    pc = input("enter pancard: ")
    if un in credentials.keys() and ps == credentials[un] and pc in users_db.keys():
        print("""
1. Deposit
2. Withdraw
3. Transfer""")
        t_type = input("enter transaction type: ").capitalize()

        if t_type == "Deposit":
            t_amount = float(input("enter amount you wish to deposit: "))
            users_db[pancard][-1] += t_amount
            timestamp = datetime.datetime.now()
            print("your current balance is: ",users_db[pancard][-1])

        elif t_type == "Withdraw":
            t_amount = float(input("Enter amount you wish to withdraw: "))
            if t_amount > users_db[pancard][-1]:
                print("you cannot withdraw more than the deposited amount")
```

```python
        else:
            users_db[pancard][-1] -= t_amount
            timestamp = datetime.datetime.now()
            print("Remaining balance is", users_db[pancard][-1])


    elif t_type == "Transfer":
        r_pancard = input("enter receiver's pancard: ")
        t_amount = float(input("enter amount you want to transfer: "))
        users_db[pancard][-1] -= t_amount
        timestamp = datetime.datetime.now()
        print("Remaining balance is", users_db[pancard][-1])
        if r_pancard in users_db.key():
            users_db[pc][-1] += t_amount


nested_t[timestamp] = [t_type, t_amount, users_db[pancard][-1]]
passbook[pancard] = nested_t
```

```python
elif choice == 4:
    un = input("enter username: ")
    ps = input("enter password: ")
    pc = input("enter pancard: ")
    if un in credentials.keys() and ps == credentials[un] and pc in users_db.keys():
        print("        Timestamp              Type     Amount   Balance")
        for i,j in passbook.items():
            for k,l in j.items():
                print(k,l, end = "\n")
```

```
~~~~~~ Welcome to WsCube Bank ~~~~~~

How can we help you today?


1. Open an Account
2. View Account Details
3. Perform Transactins (Withdraw/Deposite/Transfer)
4. Exit


enter your choice between 1 to 4:  1
Enter First Name:  Saransh
Enter Last Name:  Garg
Enter Pan card Number:  736549723645
Which type of account would you like to open (Current/Savings):  Current
How much amount do you wish to deposit?  10000
Your Assigned username is Saransh93
Your Assigned password is 4841
Accout Number:  11112222034
Account Type:  Current
Your Initial balance is Rs. 10000
```

```
1. Open an Account
2. View Account Details
3. Perform Transactins (Withdraw/Deposite/Transfer)
4. Exit


enter your choice between 1 to 4:   2
enter username:   Saransh93
enter password:   4841
enter pancard:   736549723645
Your Account Details are:
Account Number:   11112222034
Account Holders Name:   Saransh Garg
Account Type:   Current
Total Balance is:   10000


1. Open an Account
2. View Account Details
3. Perform Transactins (Withdraw/Deposite/Transfer)
4. Exit
```

```
enter your choice between 1 to 4:  3
enter username:  Saransh93
enter password:  4841
enter pancard:  736549723645

    1. Deposit
    2. Withdraw
    3. Transfer
enter transaction type:  Deposit
enter amount you wish to deposit:  5000
your current balance is:  15000.0



1. Open an Account
2. View Account Details
3. Perform Transactins (Withdraw/Deposite/Transfer)
4. Exit
```

```
enter your choice between 1 to 4:  3
enter username:  Saransh93
enter password:  4841
enter pancard:  736549723645


    1. Deposit
    2. Withdraw
    3. Transfer
enter transaction type:  Withdraw
Enter amount you wish to withdraw:  5500
Remaining balance is 9500.0



1. Open an Account
2. View Account Details
3. Perform Transactins (Withdraw/Deposite/Transfer)
4. Exit
```

```
enter your choice between 1 to 4:  4
enter username:  Saransh93
enter password:  4841
enter pancard:  736549723645
       Timestamp                Type    Amount   Balance
2025-01-12 16:51:23.078327 ['Deposit', 5000.0, 15000.0]
2025-01-12 16:52:14.415511 ['Withdraw', 5500.0, 9500.0]
```