

```
In [1]: #create class
class Atm:
    def __init__(self, pin, balance):
        self.pin = pin
        self.balance = balance

    def show(self):
        Enter = input("""
        1. Enter your pin
        2. if new>Create pin
        3. Change the pin
        4. Checking balance
        5. Withdraw
        6. Deposit
        7. Withdraw
        """)

#lets see will it work till here
```

In [2]: #yes it worked, we did not got any error

In [3]: #But how to run it? We need to have object

```
In [4]: class Atm:
    def __init__(self, pin, balance):
        self.pin = pin
        self.balance = balance

    def show(self):
        Enter = input("""
        1. Enter your pin
        2. if new>Create pin
        3. Change the pin
        4. Checking balance
        5. Withdraw
        6. Deposit
        7. Withdraw
        """)

#creating object
obj1 = Atm() #will it run? without providing any attributes?
```

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TypeError                                Traceback (most recent call last)
Cell In[4], line 18
      7         Enter=input("""
      8         1. Enter your pin
      9         2. if new>Create pin
      (...)
     14         7. Withdraw
     15         """)
     17 #creating object
--> 18 obj1=Atm()

TypeError: Atm.__init__() missing 2 required positional arguments: 'pin' and 'balance'
```

```
In [1]: class Atm:
    def __init__(self): #creating non parametrized constructor
        self.pin=""
        self.balance=1000
        self.show() #calling show function

    def show(self):
        print("Welcome to ATM")
        Enter=input("""
        1. Enter your pin
        2. if new>Create pin
        3. Change the pin
        4. Checking balance
        5. Withdraw
        6. Deposit
        7. Withdraw
        """)

    def CreatePin(self):
        self.pin=int(input("Enter pin you want to create: "))
        print("Pin Created")

#Creating object
obj1=Atm()
```

Welcome to ATM

1. Enter your pin
 2. if new>Create pin
 3. Change the pin
 4. Checking balance
 5. Withdraw
 6. Deposit
 7. Withdraw
- 1

In [4]: *#lets do more and more appropriate way*

```
In [7]: class Atm:
    def __init__(self): #creating non parametrized constructor
        self.pin=""
        self.balance=1000
        self.show() #calling show function

    def show(self):
        print("Welcome to ATM")
        Enter=input("""
        1. Enter your pin
        2. if new>Create pin
        3. Change the pin
        4. Checking balance
        5. Withdraw
        6. Deposit
        7. Withdraw
        """)

        if Enter=="1":
            pass
        elif Enter=="2":
            self.CreatePin()

    def CreatePin(self):
        self.pin=int(input("Enter pin you want to create: "))
        print("Pin Created")

#Creating object
obj1=Atm()
```

Welcome to ATM

1. Enter your pin
 2. if new>Create pin
 3. Change the pin
 4. Checking balance
 5. Withdraw
 6. Deposit
 7. Withdraw
- 2

Enter pin you want to create: 1122
Pin Created

In [8]: *#see it is working till now, now lets add more if else and other method.*

```
In [3]: class Atm:
    def __init__(self): #creating non parametrized constructor
        self.pin=""
        self.balance=1000
        self.show() #calling show function

    def show(self):
        print("Welcome to ATM")
        Enter=input("""
        1. Enter your pin
        2. if new>Create pin
        3. Change the pin
        4. Checking balance
        5. Withdraw
        6. Deposit
        7. Withdraw
        """)

        if Enter=="1":
            self.Enterpin()
        elif Enter=="2":
            self.CreatePin()
        elif Enter=="3":
            self.Changepin()

    def CreatePin(self):
        self.pin=int(input("Enter pin you want to create: "))
        print("Pin Created, now proceed")
```

```

        self.show()

    def Enterpin(self):
        self.enterpin=int(input("Enter your pin: "))
        if self.enterpin==self.pin:
            print("Please proceed")
            self.show()

    def Changepin(self):
        self.oldpin=int(input("Enter your old pin: "))
        self.newpin= int(input("Enter pin you want to change: "))
        if self.oldpin!=self.newpin:
            self.newpin==self.pin
            print("Pin changed")
        else:
            print("You entered same old pin, please change")

#Creating object
obj1=Atm()

```

Welcome to ATM

1. Enter your pin
2. if new>Create pin
3. Change the pin
4. Checking balance
5. Withdraw
6. Deposit
7. Withdraw
- 1

Enter your pin: 1212

In [4]: *#it work but lets run again, want to check by choosing 2 at first and 1*

In []: obj1=Atm()

Welcome to ATM

1. Enter your pin
2. if new>Create pin
3. Change the pin
4. Checking balance
5. Withdraw
6. Deposit
7. Withdraw
- 2

Enter pin you want to create: 1212

Pin Created, now proceed

Welcome to ATM

1. Enter your pin
2. if new>Create pin
3. Change the pin
4. Checking balance
5. Withdraw
6. Deposit
7. Withdraw
- 1

Enter your pin: 1212

Please proceed

Welcome to ATM

In []: *#yes it worked, lets made more effective*

```

In [1]: class Atm:
        def __init__(self): #creating non parametrized constructor
            self.pin=""
            self.balance=1000
            self.show() #calling show function

        def show(self):
            print("Welcome to ATM")
            Enter=input("""
            1. Enter your pin
            2. if new>Create pin
            3. Change the pin
            4. Checking balance
            5. Withdraw
            6. Deposit
            7. Exit
            """)

            if Enter=="1":
                self.Enterpin()
            elif Enter=="2":
                self.CreatePin()

```

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    elif Enter=="3":
        self.Changepin()
    elif Enter=="4":
        self.balancecheck()
    elif Enter=="5":
        self.withdraw()
    elif Enter=="6":
        self.deposit()
    elif Enter=="7":
        self.exit()

def CreatePin(self):
    self.pin=int(input("Enter pin you want to create: "))
    print("Pin Created, now proceed")
    self.show()

def Enterpin(self):
    self.enterpin=int(input("Enter your pin: "))
    if self.enterpin==self.pin:
        print("Please proceed")
        self.show()

def Changepin(self):
    self.oldpin=int(input("Enter your old pin: "))
    self.newpin= int(input("Enter pin you want to change: "))
    if self.oldpin!=self.newpin:
        self.newpin==self.pin
        print("Pin changed")
    else:
        print("You entered same old pin, please change")

def balancecheck(self):
    print("Your current balance is",self.balance)

def withdraw(self):
    self.withdrawamaount=int(input("Enter amount you want to withdraw: "))
    if self.withdrawamount>self.balance:
        print("you cannot withdraw more amount then your balance")
    else:
        print("Thank you and your current balance after withdraw is: ", (self.balance-self.withdrawamount))

def deposit(self):
    self.deposit=int(input("Enter amount you want to deposit: "))
    print("Thank you and your current balance after deposit is: ", (self.balance+self.deposit))

def exit(self):
    print("Thank you")

```

```

#Creating object
obj1=Atm()

```

Welcome to ATM

1. Enter your pin
2. if new>Create pin
3. Change the pin
4. Checking balance
5. Withdraw
6. Deposit
7. Exit

6

Enter amount you want to deposit: 10000

Thank you and your current balance after deposit is: 11000

In [2]: *#its working, but we have to make it more effective and easy, so we will do more progress in this project after #about OOP concepts like = inheritance, encapsulation, polymorphisim.*