

**# 2.1 Implement a class called BankAccount that represents a bank account. The class should have private attributes for account number, account holder name, and account balance. Include methods to deposit money, withdraw money, and display the account balance. Ensure that the account balance cannot be accessed directly from outside the class. Write a program to create an instance of the BankAccount class and test the deposit and withdrawal functionality.**

```
class Bank_Account:
```

```
    def __init__(self):
```

```
        self.balance=0
```

```
        print("Hello!!! Welcome to the Deposit & Withdrawal Machine")
```

```
    def deposit(self):
```

```
        amount=float(input("Enter amount to be Deposited: "))
```

```
        self.balance += amount
```

```
        print("\n Amount Deposited:",amount)
```

```
    def withdraw(self):
```

```
        amount = float(input("Enter amount to be Withdrawn: "))
```

```
        if self.balance>=amount:
```

```
            self.balance-=amount
```

```
            print("\n You Withdrew:", amount)
```

```
        else:
```

```
            print("\n Insufficient balance ")
```

```
    def display(self):
```

```
        print("\n Net Available Balance=",self.balance)
```

```
# Driver code
```

**# creating an object of class**

**s = Bank\_Account()**

**# Calling functions with that class object**

**s.deposit()**

**s.withdraw()**

**s.display()**

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**#2.2 Implement a class called Player that represents a cricket player. The Player class should have a method called play() which prints "The player is playing cricket. Derive two classes, Batsman and Bowler, from the Player class. Override the play() method in each derived class to print "The batsman is batting" and "The bowler is bowling", respectively. Write a program to create objects of both the Batsman and Bowler classes and call the play() method for each object.**

**# Define the Player class**

**class Player:**

**def play(self):**

**print("The player is playing cricket.")**

**# Define the Batsman class, derived from Player**

**class Batsman(Player):**

**def play(self):**

**print("The batsman is batting.")**

**# Define the Bowler class, derived from Player**

**class Bowler(Player):**

```
def play(self):  
    print("The bowler is bowling.")  
# Create objects of Batsman and Bowler classes  
batsman = Batsman()  
bowler = Bowler()  
# Call the play() method for each object  
batsman.play()  
bowler.play()
```