PART B

Programs

2. Write a program menu driven to create a BankAccount class. class should support the following methods for i) Deposit ii) Withdraw iii) GetBalanace . Create a subclass SavingsAccount class that behaves just like a BankAccount, but also has an interest rate and a method that increases the balance by the appropriate amount of interest.

Code:

```
class Bank_Account:
    def __init__(self):
        self.balance=0;
        print("Welcome to the deposit & withdrawal machine")

    def deposit(self, amount):
        self.amount=amount
        self.balance +=self.amount

    def withdraw(self,amount):
        if self.balance>=amount:
            self.balance-=amount
            print("\n You withdrew:",amount)
        else:
            print("\n Insufficient balance ")

    def getbalance(self):
        print("\n Net Available Balance=",self.balance)

class Savings_Account(Bank_Account):
    def __init__(self,rate=0.10):
```

```
        Bank_Account.__init__(self)
        self.rate=rate
        self.balance=0

    def addinterest(self):
        interest=self.balance*self.rate
        Bank_Account.deposit(self,interest)
        return (self.balance)

s=Savings_Account()

wish='y'
while wish=='y':
    print("1.Deposit\n2.Withdraw\n3.Getbalance\n4.Interest credited")
    choice=int(input("Enter your choice:"))
    if choice==1:
        amount=float(input("Enter amount to be deposited :"))
        s.deposit(amount)
        print("Amount deposited ")
    elif choice==2:
        amount=float(input("Enter amount to be withdrawn :"))
        s.withdraw(amount)
    elif choice==3:
        s.getbalance()
    elif choice==4:
        print("Interest credited ")
        print("Balance after adding interest :",s.addinterest())
```

```
    else:
        print("Wrong choice")
    wish=input("Do you want to continue?(y/n)")
```

OUTPUT:

```
Welcome to the deposit & withdrawal machine
1.Deposit
2.Withdraw
3.Getbalance
4.Interest credited
Enter your choice:1
Enter amount to be deposited :100000
Amount deposited
Do you want to continue?(y/n)y

1.Deposit
2.Withdraw
3.Getbalance
4.Interest credited
Enter your choice:4
Interest credited
Balance after adding interest : 110000.0
Do you want to continue?(y/n)y

1.Deposit
2.Withdraw
3.Getbalance
```

4.Interest credited

Enter your choice:2

Enter amount to be withdrawn :5000

You withdrew: 5000.0

Do you want to continue?(y/n)y

1.Deposit

2.Withdraw

3.Getbalance

4.Interest credited

Enter your choice:3

Net Available Balance= 105000.0

Do you want to continue?(y/n)n