

Exercise 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

```
import sys
class BankAccount:
    def __init__(self):
        self.balance = 0
    def deposit(self, amount):
        self.balance += amount
    def withdraw(self, amount):
        if self.balance >= amount:
            self.balance -= min(amount, self.balance)
            print('Amount withdrawn.')
        else:
            print('Insufficient balance..!')
    def get_balance(self):
        return self.balance
class SavingsAccount(BankAccount):
    def __init__(self, interest_rate):
        super().__init__()
        self.interest_rate = interest_rate
    def calculate_interest(self):
        self.balance *= 1 + self.interest_rate / 100
        print("Interest added.")

account = SavingsAccount(interest_rate=2)
while True:
    choice = input("\n1. Deposit\n2. Withdraw\n3. Get Balance\n4. Add Interest\n5.
Exit\nEnter your choice: ")
    if choice == "1":
        account.deposit(float(input("Enter the amount to deposit: ")))
    elif choice == "2":
        account.withdraw(float(input("Enter the amount to withdraw: ")))
    elif choice == "3":
        print("Account balance: ", account.get_balance())
    elif choice == "4":
        account.calculate_interest()
    elif choice == "5":
        break
    else:
        print("Invalid choice. Please try again.")
```

Output

```
1. Deposit
2. Withdraw
3. Get Balance
4. Add Interest
5. Exit
Enter your choice: 6
Invalid choice. Please try again.

1. Deposit
2. Withdraw
3. Get Balance
4. Add Interest
5. Exit
Enter your choice: 1
Enter the amount to deposit: 10000
```

```
1. Deposit
2. Withdraw
3. Get Balance
4. Add Interest
5. Exit
Enter your choice: 3
Account balance: 10000.0

1. Deposit
2. Withdraw
3. Get Balance
4. Add Interest
5. Exit
Enter your choice: 2
Enter the amount to withdraw: 1000
Amount withdrawn.
```

<p>1. Deposit 2. Withdraw 3. Get Balance 4. Add Interest 5. Exit Enter your choice: 3 Account balance: 9000.0</p> <p>1. Deposit 2. Withdraw 3. Get Balance 4. Add Interest 5. Exit Enter your choice: 4 Interest added.</p> <p>1. Deposit 2. Withdraw 3. Get Balance 4. Add Interest 5. Exit Enter your choice: 3 Account balance: 9180.0</p>	<p>1. Deposit 2. Withdraw 3. Get Balance 4. Add Interest 5. Exit Enter your choice: 2 Enter the amount to withdraw: 10000 Insufficient balance..!</p> <p>1. Deposit 2. Withdraw 3. Get Balance 4. Add Interest 5. Exit Enter your choice: 5</p>
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Remarks			