JAVA ASSIGNMENT 1

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SECTION-B
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CODE:-

```
class Account {
private int accountNumber;
private String accountHolderName;
private double balance;
private String email;
private String phoneNumber;
public Account(int accountNumber, String accountHolderName, double
balance, String email, String phoneNumber) {
this.accountNumber = accountNumber;
this.accountHolderName = accountHolderName;
this.balance = balance:
this.email = email;
this.phoneNumber = phoneNumber;
}
public void deposit(double amount) {
if (amount > 0) {
balance += amount;
System.out.println("Deposit successful. New balance: " +
balance);
```

```
} else {
System.out.println("Invalid deposit amount.");
}
}
public void withdraw(double amount) {
if (amount > 0 && balance >= amount) {
balance -= amount;
System.out.println("Withdrawal successful. Remaining balance:
" + balance);
} else {
System.out.println("Invalid withdrawal amount or insufficient
balance.");
}
}
public void displayAccountDetails() {
System.out.println("Account Number: " + accountNumber);
System.out.println("Account Holder: " + accountHolderName);
System.out.println("Balance: " + balance);
System.out.println("Email: " + email);
System.out.println("Phone Number: " + phoneNumber);
}
public void updateContactDetails(String email, String phoneNumber) {
this.email = email;
this.phoneNumber = phoneNumber;
System.out.println("Contact details updated successfully!");
}
public int getAccountNumber() {
return accountNumber;
```

```
}
}
public class UserInterface {
private static Account[] accounts = new Account[100];
private static int accountCount = 0;
private static int nextAccountNumber = 1001;
private static Scanner sc = new Scanner(System.in);
public static void createAccount() {
System.out.print("Enter account holder name: ");
String name = sc.nextLine();
System.out.print("Enter initial deposit amount: ");
double balance = sc.nextDouble();
sc.nextLine();
System.out.print("Enter email address: ");
String email = sc.nextLine();
System.out.print("Enter phone number: ");
String phone = sc.nextLine();
accounts[accountCount] = new Account(nextAccountNumber, name,
balance, email, phone);
System.out.println("Account created successfully with Account
Number: " + nextAccountNumber);
nextAccountNumber++;
accountCount++;
}
public static Account findAccount(int accountNumber) {
for (int i = 0; i < accountCount; i++) {
if (accounts[i].getAccountNumber() == accountNumber) {
return accounts[i];
```

```
}
}
return null;
}
public static void performDeposit() {
System.out.print("Enter account number: ");
int accNum = sc.nextInt();
System.out.print("Enter deposit amount: ");
double amount = sc.nextDouble();
Account acc = findAccount(accNum);
if (acc!= null) {
acc.deposit(amount);
} else {
System.out.println("Account not found.");
}
}
public static void performWithdrawal() {
System.out.print("Enter account number: ");
int accNum = sc.nextInt();
System.out.print("Enter withdrawal amount: ");
double amount = sc.nextDouble();
Account acc = findAccount(accNum);
if (acc!= null) {
acc.withdraw(amount);
} else {
System.out.println("Account not found.");
}
}
```

```
public static void showAccountDetails() {
System.out.print("Enter account number: ");
int accNum = sc.nextInt();
Account acc = findAccount(accNum);
if (acc!= null) {
acc.displayAccountDetails();
} else {
System.out.println("Account not found.");
}
}
public static void updateContact() {
System.out.print("Enter account number: ");
int accNum = sc.nextInt();
sc.nextLine();
System.out.print("Enter new email: ");
String email = sc.nextLine();
System.out.print("Enter new phone number: ");
String phone = sc.nextLine();
Account acc = findAccount(accNum);
if (acc!= null) {
acc.updateContactDetails(email, phone);
} else {
System.out.println("Account not found.");
}
}
public static void mainMenu() {
int choice;
do{
```

```
System.out.println("\n--- Banking Application ---");
System.out.println("1. Create a new account");
System.out.println("2. Deposit money");
System.out.println("3. Withdraw money");
System.out.println("4. View account details");
System.out.println("5. Update contact details");
System.out.println("6. Exit");
System.out.print("Enter your choice: ");
choice = sc.nextInt();
sc.nextLine();
switch (choice) {
case 1: createAccount(); break;
case 2: performDeposit(); break;
case 3: performWithdrawal(); break;
case 4: showAccountDetails(); break;
case 5: updateContact(); break;
case 6: System.out.println("Exiting... Thank you!");
break;
default: System.out.println("Invalid choice! Try again.");
}
} while (choice != 6);
}
public static void main(String[] args) {
mainMenu();
}
```

OUTPUT:-

```
1. Create a new account
2. Deposit money
3. Withdraw money
4. View account details
5. Update contact details
6. Exit
Enter your choice: 1
Enter account holder name: Bhavya
Enter initial deposit amount: 5000
Enter email address: bhavya@example.com
Enter phone number: 9876543210
Account created successfully with Account Number: 1001
```