

Assignment # 04

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Source Code

Main.dart

```
import 'bankAccount.dart';
import 'student.dart';
void main() {
    //Bank Account
    BankAccount bankAccount1 = BankAccount(234657, 24000, "Current",
2.3);
    bankAccount1.deposit(1000);
    bankAccount1.withDraw(26000);
    bankAccount1.addInterest();
    bankAccount1.display();
    BankAccount bankAccount2 = BankAccount(125436, 21000, "Saving",
2.4);
    bankAccount2.deposit(1000);
    bankAccount2.withDraw(20000);
    bankAccount2.addInterest();
    bankAccount2.display();

    //Student
    Student student1 = Student("Kashan", 2345, ["MATHS", "PHYSICS",
"ENGLISH"]);
    student1.addCourse("COMPUTER");
    student1.dropCourse("MATHS");
    student1.displayCourses();

    Student student2 = Student("Malik", 6857, ["APP DEV", "AI
CHATBOT"]);
    student2.addCourse("WEB DEV");
    student2.dropCourse("AI CHATBOT");
```

```
student2.displayCourses();  
}
```

Student.dart

```
class Student{  
    String name;  
    int id;  
    List <String> courses;  
    Student(  
        this.name,  
        this.id,  
        this.courses,  
    );  
    void addCourse(String course){  
        courses = courses + [course];  
    }  
    void dropCourse(String course){  
        courses.remove(course);  
    }  
    void displayCourses(){  
        print("Name: ${name}");  
        print("ID: ${id}");  
        print("Courses: ${courses}");  
    }  
}
```

bankAccount.dar

```
class BankAccount{  
    int accountNumber;  
    double balance;  
    String accountType;  
    double interestRate;  
    BankAccount(  
        this.accountNumber,
```

```
this.balance,
this.accountType,
this.interestRate,
);
void deposit (int amount){
    balance = balance + amount;
    print("You are deposit an amount ${amount} and now your total
balance is ${balance}");
}
void withdraw (int amount){
    if(balance >= amount){
        balance = balance - amount;
        print("You are withdraw an amount ${amount} and now your total
balance is ${balance}");
    }
    else{
        print("Insufficient funds. Withdrawal unsuccessful.");
    }
}
void addInterest(){
    var interestAmount = balance * (interestRate / 100);
    balance = balance + interestAmount;
    print("You are added interest of ${interestAmount}. Now
your New balance is ${balance}");
}
void display(){
    print("Account Number: ${accountNumber}");
    print("Balance: ${balance}");
    print("Account Type: ${accountType}");
    print("Interest Rate: ${interestRate}");
}
}
```