Assignment 1

```
public class Rectangle {
  private int length;
  private int width;
  public Rectangle(int length, int width) {
    this.length = length;
    this.width = width;
  }
  public int area() {
    return length * width;
  }
  public static void main(String[] args) {
    Rectangle rectangle1 = new Rectangle(5, 10);
    Rectangle rectangle2 = new Rectangle(7, 3);
    if(rectangle1.area() > rectangle2.area()) {
       System.out.println("Rectangle 1 > Rectangle 2");
    } else if(rectangle1.area() < rectangle2.area()) {
       System.out.println("Rectangle 1 < Rectangle 2");
    } else{
       System.out.println("They are equal!");
    }
  }
}
```

OUTPUT:

```
PS A:\Microsoft VS Code\New folder> a:; cd 'a:\Microsoft VS Code\New folder'; 8 java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\Rohan\AppDate\d4da3b8820bb4e396c5348882b6e7920\redhat.java\jdt_ws\New folder_166f3bb5\bin' Rectangle 1 > Rectangle 2
```

Assignment 2

```
public class BankAccount {
  String accHolderName;
  int accNumber;
  int balance;
  public BankAccount(String accHolderName, int accNumber, int balance) {
    this.accHolderName = accHolderName;
    this.accNumber = accNumber;
    this.balance = balance;
  }
  public String getAccHolderName() {
    return accHolderName;
  }
  public int getAccNumber() {
    return accNumber;
  }
  public int getBalance() {
    return balance;
  public void setAccHolderName(String accHolderName) {
    this.accHolderName = accHolderName;
  }
  public void setAccNumber(int accNumber) {
    this.accNumber = accNumber;
  }
  public void setBalance(int balance) {
    this.balance = balance;
  public int deposit(int amount) {
    if (amount > 0) {
      balance += amount;
```

```
return balance;
  } else {
    System.out.println("Deposit amount must be positive.");
    return balance;
  }
}
public int withdraw(int amount) {
  if (amount > 0 && amount <= balance) {
    balance -= amount;
    return balance;
  } else {
    System.out.println("Insufficient or invalid funds.");
    return balance;
  }
}
public void display(){
  System.out.println("Account Holder: " + accHolderName);
  System.out.println("Account Number: " + accNumber);
  System.out.println("Current Balance: " + balance);
}
public static void main(String[] args) {
  BankAccount account = new BankAccount("John Doe", 123456, 1000);
  account.display();
  account.deposit(500);
  account.withdraw(200);
  account.display();
  account.withdraw(1500);
  account.deposit(-100);
  account.display();
}
```

}

OUTPUT:

```
PS A:\Microsoft VS Code\New folder> a:; cd 'a:\Microsoft VS Code\New folder'; & 'C:\Program File java.exe' '-XX:+ShowCodeDetailsInExceptionMessages' '-cp' 'C:\Users\Rohan\AppData\Roaming\Code\Us e\d4da3b8820bb4e396c5348882b6e7920\redhat.java\jdt_ws\New folder_166f3bb5\bin' 'BankAccount' Account Holder: John Doe Account Number: 123456
Current Balance: 1000
Account Holder: John Doe Account Number: 123456
Current Balance: 1300
Insufficient or invalid funds.
Deposit amount must be positive.
Account Holder: John Doe Account Number: 123456
Current Balance: 1300
PS A:\Microsoft VS Code\New folder>
```