Experiment - 2

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Branch: BE-CSE(LEET) **Section/Group: WM-20BCS-616/A**
Semester: 5th **Date of Performance: 20/08/2022**
Subject Name: Machine Learning Lab **Subject Code: 20CSP-317**

1. Aim/Overview of the practical:
Design and implement a simple inventory control system for a small video rental store.

2. Task to be done/ Which logistics used:
Write the program to design and implement a simple inventory control system for a small video rental store.

3. Algorithm/Flowchart (For programming-based labs)**:**

4. Steps for experiment/practical/Code:

```
import java.util.Scanner;

class Video {
  public String title;
  public boolean checked = true;
  int avgrating;

  public boolean checked() {
    return checked;
  }

  public void rent() {
    checked = false;
  }

  public void returned() {
    checked = true;
    System.out.println("Video is returned ");
  }
```

```
  public int getRating() {
    if (avgrating > 0) {
      return avgrating;
    } else {
      System.out.println("Rating is not available");
      return 0;
    }
  }
}

class VideoStore extends Video {
  Video v[] = new Video[10];
  static int i = 0;

  void addVideo(String title) {
    v[i] = new Video();
    this.title = title;
    v[i].title = title;
    i++;
    System.out.println("Video Added Successfully");
  }

  void checkOut(String title) {
    for (int k = 0; k < i; k++) {
      if (v[k].title.equalsIgnoreCase(title)) {
        if (v[k].checked()) {
          v[k].rent();
          System.out.println("Video is rented");
        } else {
          System.out.println("Sorry Video not available");
        }
      }
    }
  }
```

```
void returnVideo(String title) {
  if (i == 0) {
    System.out.println("You have no video to return");
  }
  for (int k = 0; k < i; k++) {
    if (v[k].title.equalsIgnoreCase(title)) {
      v[k].checked = true;
    }
  }
}

public void receiveRating() {
  if (i == 0) {
    System.out.println("No Video inInventory");
  } else {
    for (int k = 0; k < i; k++) {
      System.out.println("Enter the integer rating for movie " + v[k].title);
      Scanner ob = new Scanner(System.in);
      v[k].avgrating = ob.nextInt();
    }
  }
}

public void listInventory() {
  if (i == 0) {
    System.out.println("No Video in Inventory");
  } else {
    for (int k = 0; k < i; k++) {
      System.out.println(
        k +
        1 +
        ". " +
        v[k].title +
        " " +
        "Rating " +
```

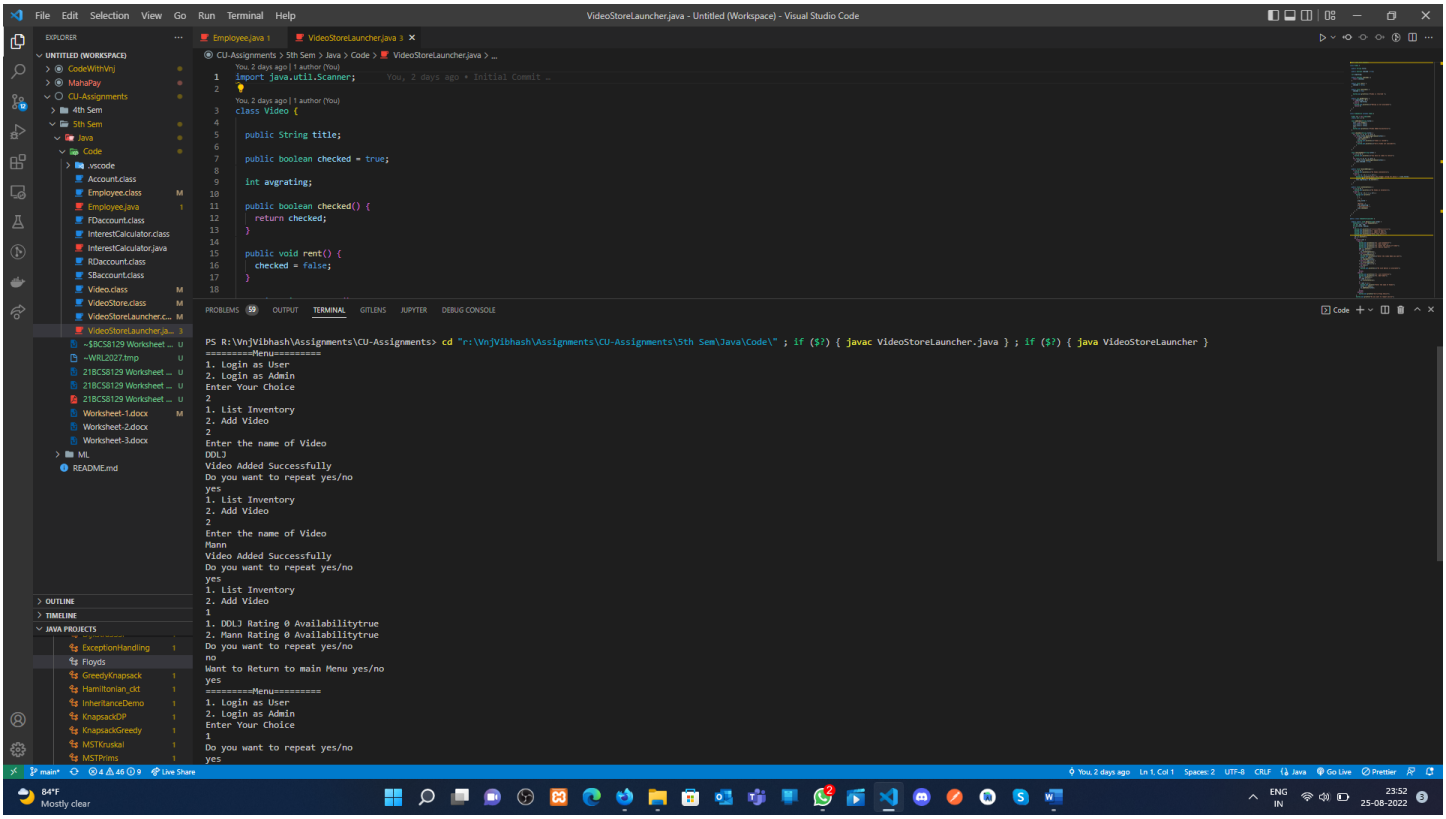
```
        v[k].avgrating +
        " Availability" +
        v[k].checked()
      );
    }
   }
  }
}

public class VideoStoreLauncher {
  public static void main(String[] args) {
    VideoStore vs = new VideoStore();
    int ch, uCh, aCh;
    String title, choice;
    do {
      System.out.println("=========Menu=========");
      System.out.println("1. Login as User");
      System.out.println("2. Login as Admin");
      System.out.println("Enter Your Choice");
      Scanner s = new Scanner(System.in);
      ch = s.nextInt();
      do {
        switch (ch) {
          case 1:
            System.out.println("1. List Inventory");
            System.out.println("2. Rent Video");
            System.out.println("3. Enter the rating of Video");
            System.out.println("4. Return Video");
            uCh = s.nextInt();
            if (uCh == 1) {
              vs.listInventory();
            } else if (uCh == 2) {
              vs.listInventory();
              System.out.println("Enter the video Name you want");
```

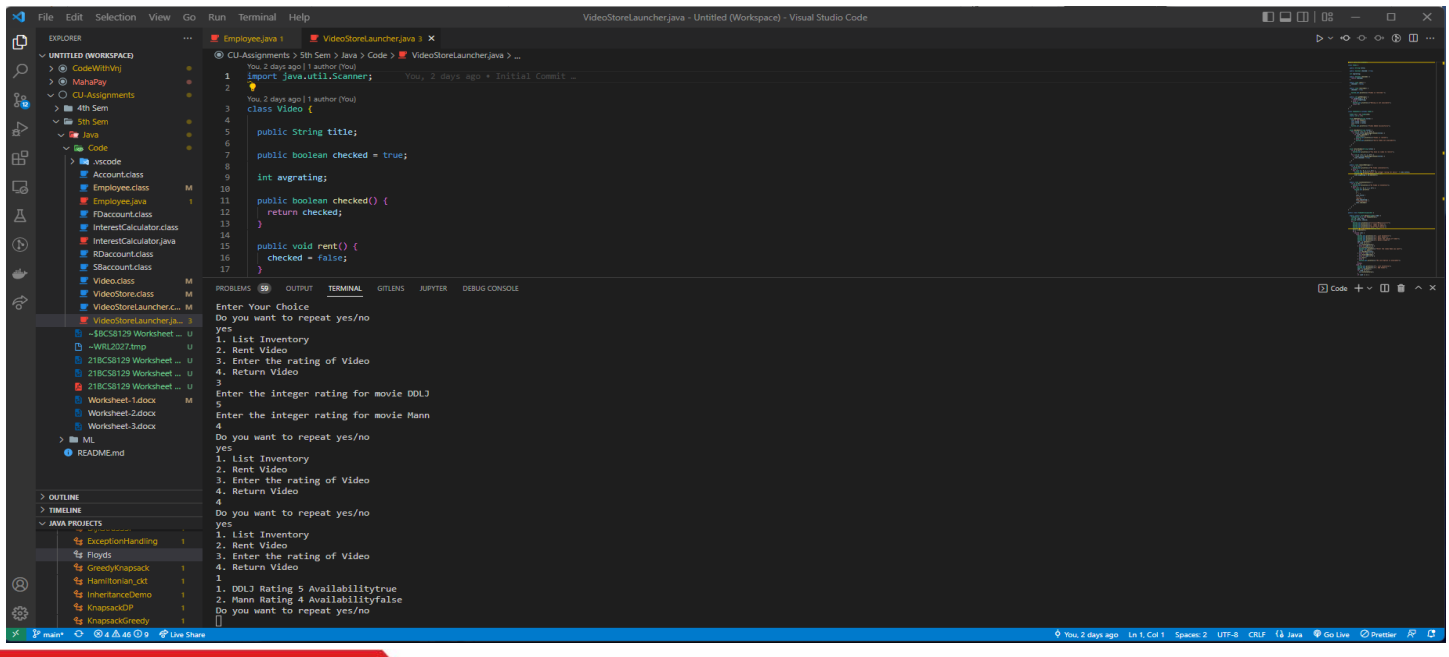
```
            title = s.next();
            vs.checkOut(title);
          } else if (uCh == 3) {
            vs.receiveRating();
          } else if (uCh == 4) {
            vs.rent();
          } else {
            System.out.println("No such Option is available");
          }
          break;
        case 2:
          System.out.println("1. List Inventory");
          System.out.println("2. Add Video");
          aCh = s.nextInt();
          if (aCh == 1) {
            vs.listInventory();
          }
          if (aCh == 2) {
            System.out.println("Enter the name of Video");
            title = s.next();
            vs.addVideo(title);
          }
          break;
        default:
          System.out.println("Sorry Wrong Choice");
      }
      System.out.println("Do you want to repeat yes/no");
      choice = s.next();
    } while (choice.equalsIgnoreCase("yes"));
    System.out.println("Want to Return to main Menu yes/no");
    choice = s.next();
  } while (choice.equalsIgnoreCase("yes"));
 }
}
```

5. Observations/Discussions/ Complexity Analysis:

Here we have created the VideoStoreLauncher, VideoStore and Video and I have Passed all the Parameters according to the Requirement given in the question.

6. Result/Output/Writing Summary:





Learning outcomes (What I have learnt):

1. Learn How use the inheritance concept.

2. java classes and all the features.

Evaluation Grid (To be created as per the SOP and Assessment guidelines by the faculty):

Sr. No.	Parameters	Marks Obtained	Maximum Marks
1.			
2.			
3.			