

CIS 255 - Java Programming  
Project #5  
Movie Purchase

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Write the interactive Java class Project5 and following the following instructions.

1. Create appropriate variables to contain the following movie prices:

Movie Type	Price
DVD	\$14.99
Blue-ray	\$19.99
4K UHD	\$26.99

2. Create a variable to hold a tax rate of 0.09.
3. Create variables to store a subtotal and a total price.
4. Display the prompt "\nDo you want to rent a movie? " to the user.
5. Capture the user input as a character:

**Example Code:**

```
char response = in.next().charAt(0);
```

6. Evaluate the user input using an **if...then** statement.
  - a. If the user input is **an uppercase or lowercase 'N'** do the following:
    - Display the message "\nWe are sorry that you are not interested." to the user.
  - b. If the user input is **an uppercase or lowercase 'Y'** do the following:
    - Display the prompt "\nDVD, Blu-ray, or 4K UHD? [D, B, or U]: ".
    - As before, capture the user input as a character
    - Evaluate the user input using a **switch** statement as follows:
      - If the user input is **an uppercase or lowercase 'D'** do the following:
        - Using a `System.out.printf()` statement, display the message "\nYou added a DVD to your cart for \$%.2f.\n" to the user displaying the DVD price.
        - Assign the DVD movie price to the variable you created for the subtotal.
      - If the user input is **an uppercase or lowercase 'B'** do the following:
        - Using a `System.out.printf()` statement, display the message "\nYou added a Blue-ray movie to your cart for \$%.2f.\n" to the user displaying the DVD price.
        - Assign the Blu-ray movie price to the variable you created for the subtotal.
      - If the user input is **an uppercase or lowercase 'U'** do the following:
        - Using a `System.out.printf()` statement, display the message "\nYou added a 4K UHD movie to your cart for \$%.2f.\n" to the user displaying the DVD price.
        - Assign the 4K UHD movie price to the variable you created for the subtotal.
      - If the user input is none of the required selections (**the default for the switch statement**) do the following:
        - Display the message "\nYou made an invalid selection!" to the user.

- After the ***switch*** statement, do the following:
  - Using the variable that contains the `subtotal`, calculate the total price using the variable created for the `tax rate`. Assign the calculated result to the variable created to store the total.
  - Using a `System.out.printf()` statement, display the message "`\nYour cart subtotal is $%.2f.\n`" to the user displaying the subtotal.
  - Using a `System.out.printf()` statement, display the message "`\nAfter a tax rate of %.1f%% is added to the subtotal,\n`" to the user displaying the `tax rate` as a percentage.
  - Using a `System.out.printf()` statement, display the message "`a charge of $%.2f will be applied to your credit card.\n`" to the user displaying the previously calculated total with the `tax rate` included.
- c. For the `else` in the `if` statement, if the initial user input is not ***an uppercase 'Y' or 'N'*** do the following:
  - Display the message "`\nYou made an invalid selection!`" to the user.
- 7. After the `if` statement checking for ***an uppercase 'Y' or 'N'***, display the message "`\nThank you for shopping. Goodbye!`" to the user.

**NOTE:**

Use lecture comments to determine a good way. Follow all style and documentation conventions. Turn in a listing of your source code, a sample run, and use these pages as cover sheets (*Do not write on the coversheet other than your name and date*). Late assignments will not be accepted.

## Screen

```
C:\>javac Project5.java
C:\>java Project5

Do you want to rent a movie? y

DVD, Blu-ray, or 4K UHD? [D, B, or U]: d

You added a DVD movie to your cart for $14.99.

Your cart subtotal is $14.99.

After a tax rate of 9.0% is added to the subtotal,
a charge of $16.34 will be applied to your credit card.

Thank you for shopping. Goodbye!

C:\>java Project5

Do you want to rent a movie? y

DVD, Blu-ray, or 4K UHD? [D, B, or U]: b

You added a Blu-ray movie to your cart for $19.99.

Your cart subtotal is $19.99.

After a tax rate of 9.0% is added to the subtotal,
a charge of $21.79 will be applied to your credit card.

Thank you for shopping. Goodbye!

C:\>java Project5

Do you want to rent a movie? y

DVD, Blu-ray, or 4K UHD? [D, B, or U]: u

You added a 4K UHD movie to your cart for $26.99.

Your cart subtotal is $26.99.

After a tax rate of 9.0% is added to the subtotal,
a charge of $29.42 will be applied to your credit card.

Thank you for shopping. Goodbye!

C:\>java Project5

Do you want to rent a movie? y

DVD, Blu-ray, or 4K UHD? [D, B, or U]: x

You made an invalid selection!
Your cart subtotal is $0.00.

After a tax rate of 9.0% is added to the subtotal,
a charge of $0.00 will be applied to your credit card.

Thank you for shopping. Goodbye!

C:\>java Project5

Do you want to rent a movie? x

You made an invalid selection!

Thank you for shopping. Goodbye!

C:\>
```