

## CPS 171 MACHINE PROBLEM 3 --- Due Date:

### ATM Transaction Validator

The ATM Transaction Validator requires an EOF loop and if-then logic. You will read in a file called `customer.dat` which contains the following information on each line of the file:

customer last name  
checking account balance  
transaction type code  
transaction amount

Be sure to provide an appropriate error message if the file cannot be found. Also, remember to echo each input item as well. A negative amount should cause an error message to be written and the transaction is ignored. Invalid transaction types must be reported as errors. All monetary values should be printed with 2 decimal places.

**Transaction type codes** are W)ithdraw, D)eposit, B)report the balance

W	Subtract this money from the account. Allowed only if amount is less than or equal to the balance or an error message is printed.
D	Add this money to the account. Any positive amount is allowed.
B	Report the current balance (amount is ignored).

At the end of the transaction the program writes out the new balance or why it couldn't be done.

In any case, if the balance is below \$300, a warning message should be printed.

You must get a copy of the data file which is located on the Novell network at `T:\class\cps\cps171\datafiles\customer.dat` and put it in the same subdirectory as your program.

Sample Output:

For example, the `customer.dat` file below

Jones 300 D 100 White 350 W 51
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Might produce output as shown below

```
Customer Name: Jones
Checking balance before transaction $ 300.00
Transaction Type: D
Transaction amount $100.00
Checking balance after transaction $ 400.00
-----
Customer Name: White
Checking balance before transaction $ 350.00
Transaction Type: W
Transaction amount $51.00
Warning: account is below minimum $ 300.00
Checking balance after transaction $ 299.00
```

What to turn in:

- ? Your program listing
- ? Output from the program
- ? Hardcopy of customer.dat file
- ? Program grading sheet stapled to top