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| Program Name: | Developer: | | Object: | | Date: |
| Chapter3\_prob13 | Kenny Coltharp | | Class Chaptere3\_prob13 | | May 28, 2015 |
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| Object | | **Event Tigger** | | **Event Processing** | |
| Class Chapter3\_problem13 | | Main method | | Declare and initialize constant variables for: Internet package name, package cost, package allowed hours, and cost per hour over package allowed hours.  Setup class constructor.  Declare and initialize main method variables for the package purchased, Internet hours on their bill, additional hours over what is allowed, the total bill, and the string used for the output.  Setup scanner object (input) to get input from user | |
| Method main | | Call to constructor object | | Create prob13 class object  TRY packagePurchased = prob13.getPackage()  internetHours = prob13.getHours()  CATCH (exception)  Print exception message  FINALLY close scanner object  SWITCH(packagePurchase)  CASE “A”  Calculate additionalHours  Calculate totalBill  Print output string  CASE “B”  Calculate additionalHours  Calculate totalBill  Print output string  CASE “C”  Calculate totalBill  Print output string  END method Main | |
| prob13 (Chapter3\_Problem13 Class Object) | | prob13.getPackage() method call | | Declare and initialize method variables packagePurchased & strPackage  Create scanner object input  DO  Get the Internet packagePurchased from the user. Convert packagePurchased to UpperCase.  IF packagePurchased = A display the details of package A to the user.  Close input object  RETURN packagePurchased to main method  ELSE IF packagePurchased = B display the details of package B to the user.  Close input object  RETURN packagePurchased to main method  ELSE IF packagePurchased = C display the details of package C to the user.  Close input object  RETURN packagePurchased to main method  ELSE IF packagePurchased = Empty  Print error no input detected.  ELSE  Print error incorrect package selection.  WHILE packagePurchased does not = A, B, C, or is not empty  RETURN packagePurchased to main method | |
| prob13 (Chapter3\_Problem13 Class Object) | | prob13.getHours() method call | | Declare and initialize method variable hoursCharged & create scanner object input  get hoursCharged from user  Convert String hoursCharged to a Double billedHours  WHILE containsOnlyNumbers() = False & billedHours <= 0  IF method call to containsOnlyNumbers() = True  Convert hoursCharged to billedHours  IF billedHours > 0  Close scanner object  Return billedHours  ELSE  Print error input < 0  End inner if else  ELSE  Print error  End outer if else  End while loop  Close scanner object  Return billed hours | |
| Method call from hoursCharged within an IF statement in prob13.getHours() method call | | method call to containsOnlyNumbers() within IF statement | | Test each character in the String argument, one at a time, to ensure it is a numeric number. IF any character in the String is not numeric, the method returns a Boolean value of False. IF all characters are numeric the method returns a Boolean value of True. | |
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