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CPT 232

Exam 2

11/6/11

**Data Dictionary**

**Analysis**

Outputs: user\_name, purchase\_pounds, reduction\_rate, total\_cost, total\_cost\_discount, total\_savings

**Name** **Type** **Description**

user\_name string user’s name

purchase\_pounds double amount of pounds to be purchased

reduction\_rate double reduction rate chosen depending on amount of pounds

total\_cost double total cost without discount

total\_cost\_discount double total cost with discount

total\_savings double total savings after discount applied

BASE\_PRICE double constant 1.13 dollars per pound

**Calculate**

total\_cost = purchase\_pounds \* BASE\_PRICE

total\_cost\_discount = total\_cost \* reduction\_rate

total\_savings = total\_cost – total\_cost\_discount

**Flowchart**

Start

total\_cost = purchase\_pounds \* BASE\_PRICE

Enter user\_name, purchase\_pounds

if (purchase\_pounds >= 0.0 && purchase\_pounds <= 500.0

N Y

reduction\_rate = .05

reduction\_rate = .02

reduction\_rate = .04

if (purchase\_pounds > 9000.0 && purchase\_pounds <= 15000.0)

if (purchase\_pounds > 500.0 && purchase\_pounds <= 9000.0

)

Y

N

N Y

total\_cost\_discount = total\_cost \* reduction\_rate

reduction\_rate = .09

Stop

Display error message

if ( purchase\_pounds > 15,000)

Y

N

Stop

Display user\_name, purchase\_pounds, reduction\_rate, total\_cost, total\_cost\_discount, total\_savings

total\_savings = total\_cost – total\_cost\_discount