**PS10P3 – IPO**

Prompt the user to repeatedly to do the program (input (Yes or No)). If they response Yes go into the loop and prompt the user for make, model, electric vehicle code (Y or N) and MSRP (sticker price) of an automobile. Write a function to compute the out the door price. Pass to the function the MSRP, make, model and electric vehicle code. Determine the percent off the MSRP then compute the new MSRP and finally add 7% sales tax to the total. Return and display the total. Also sum all MSRP’s and sum of all sales price of the cars (MSRP – discount + tax).

To determine percent off MSRP Percent off MSRP

Honda Accord 0.10

Toyota Rav4 0.15

All electric vehicles 0.30

All other vehicles 0.05

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| **INPUT** | **PROCESSING** | **OUTPUT** |
|  | FunctionCarTotalPrice(Make, Model, EVCode, MSRP)  if Make == “Honda” and Model == “Accord” and EVCode == “N”  PercentOff = 0.10  elif Make == “Toyota” and Model == ”Rav4” and EVCode == “N”  PercentOff = 0.15  elif EVCode == “Y”  PercentOff = 0.30  else  PercentOff = 0.05  NewMSRP = MSRP – (MSRP \* PercentOff)  CarTotalPrice = NewMSRP + (NewMSRP \* 0.07)  Return CarTotalPrice |  |
| Make  Model  EVCode  MSRP |  |  |
|  | Main  Would you like to calculate the total price of a new car? (Yes or No)  While Response == “Yes”:  Input Make, Model, EVCode, MSRP  CarTotalPrice = FunctionCarTotalPrice(Make, Model, EVCode, MSRP)  SumOfAllMSRP = SumOfAllMSRP + MSRP  SumOfAllSales = SumOfAllSales + CarTotalPrice    **Display:** *CarTotalPrice*  Would you like to calculate the price of another car? (Yes or No) | CarTotalPrice |
|  | **Display:** *SumOfAllMSRP, SumOfAllSales* | SumOfAllMSRP  SumOfAllSales |