Digital assignment 2

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QUESTION:

ABC car showroom sells various types of cars such as Hatchback, Sedan, SUVs, and MUV. Due to the year-end sale, the showroom provides a 3%, 5%, 10%, and 15% discount for various car models Hatchback, Sedan, SUV, and MUV respectively. Also applies 12% of GST for the total amount of purchase Write a C program to implement the above scenario which will read the type_of_the_car, price_of_the_car and extra-fitting_price_of_the_car as input from the user and estimate the Net amount to be paid to the showroom. If the type of car is other than Hatchback, Sedan, SUV, and MUV then display "Invalid Type". (Difficulty Level: Easy)

> The net amount to be paid to the showroom is estimated as follows:
> (For example-if the purchased car is Hatchback)
> Total = price_of_the_car + extra_fitting_price_of_the_car

Discount = Total * 0.03 // 0.03 denotes 3% wastage

 gst = (Total - Discount) * 0.12 // 0.12 denotes 12% GST

net = Total – Discount + gst

Answer:

```c
#include <stdio.h>
#include <string.h>
#define MAX_LENGTH 20
int main() {
    char type[MAX_LENGTH];
    float price, fitting, total, discount, gst, net;
    printf("Enter the type of car (Hatchback, Sedan, SUV, MUV):\n");
    scanf("%s", type);
    printf("Enter the price of the car:\n");
    scanf("%f", &price);
    printf("Enter the extra fitting price of the car:\n");
    scanf("%f", &fitting);
    total = price + fitting;
    if (strcmp(type, "Hatchback") == 0) {
        discount = total * 0.03;
    } else if (strcmp(type, "Sedan") == 0) {
        discount = total * 0.05;
    } else if (strcmp(type, "SUV") == 0) {
        discount = total * 0.10;
    } else if (strcmp(type, "MUV") == 0) {
        discount = total * 0.15;
    } else {
        printf("Invalid Type\n");
        return 0;
    }
    gst = (total - discount) * 0.12; // 12% GST
    net = total - discount + gst;
    printf("Net amount to be paid: %.2f\n", net);
```

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return 0;}
```