K. J. Somaiya College of Engineering, Mumbai-77

(A Constituent College of Somaiya Vidyavihar University)

TITLE: MINI-PROJECT

AIM:

Program for a dealership of a car showroom which helps the user for determining the finances of the cars.

PROJECT MADE BY :

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Implementation details:

```
from prettytable import PrettyTable#Using the pyhton library prettytable
print("Welcome to XYZ MOTORS")
def car_name(name):#Function to record the car name
    print("You are buying\t"+name)
def initial_cost(p):#Function to record the car price
    print("Your cost for buying the car is ₹ ",p)
def type_payment(y,p,name):#Function for payment method
    bdp=(30*p)/100#storing 30% of cost in a varible bdp
    if y==1:#Choice to make pyment in Cheque/Cash
        m=int(input('1=Cheque,2=Cash\n'))
        if m==1:#Payment in cheque
            total= p
            print('Total price to pay is ₹ ',total)
            t=total/5
            payTable=PrettyTable({"Car Name","Car Price",})
            payTable.add_row([name,p])
            print(payTable,'\nDivide the cheques to 5\nAmount to be written per cheque ₹ ',t)
        if m==2:#Payment in cash
            total=p
            payTable=PrettyTable({"Car Name","Car Price"})
            payTable.add_row([name,p])
            print(payTable,'\nTotal price to pay is ₹ ',total)
```

```
    if y==2:#Payment using EMI
        var="%"
        print("PLease make a downpayment which should be more than or equal to 30"+var+" of the original car price")
        down_payment=int(input("Please enter a value for down payment\n"))
        if down_payment>=bdp:#Checking whether the down payment is valid or not
            print(" Welcome to EMI \n### SCHEMES AVAILABLE FOR EMI ### \n1 YEAR , 5 YEARS ")
            emi_period = int(input(" Enter the period for emi: "))
            if emi_period == 1:#Time period is for 1 year
                rateTable=PrettyTable(["Option No.","Bank Name","Rate"])#Table to show rate of interest per bank
                rateTable.add_row(["1","SBI","6%"])
                rateTable.add_row(["2","AXIS","8%"])
                rateTable.add_row(["3","HDFC","7%"])
                rateTable.add_row(["4","HSBC","6.5%"])
                rateTable.add_row(["5","KOTAK","8.5%"])
                print(rateTable)#Printing rate table
                print("Select the bank for loan",var,"interest may vary ")
                rate=[6,8,7,6.5,8.5]#List for rate
                r=int(input("Please enter the number corresponding to the bank chosen\n"))#Taking user input for choice of bank
                period = 1
                adp=p-(down_payment)#Subtracting down payment from the price
                print("Price to be paid after down payment ₹ ",adp)
                interest = (adp * period * rate[r-1])/100#Calculating interest
                print("The interest for 1 year will be ₹ ", interest)
```

```
        print("The interest for 1 year will be ₹ ", interest )
        total_amount = adp + interest#Aadding interest to the remaing amount
        emi=total_amount/12#Dividing to get per month payment
        print(" Hence total amount will be ₹ ", total_amount,"The amount to be paid per month for 1 year ₹ ",emi)
        payTable=PrettyTable(["Car Name","Car Price","Down Payment","Interest for 12 Months","Total After Down Payment"
        payTable.add_row([name,p,down_payment,interest,total_amount,emi])
        print(payTable)#Printing the table
    elif emi_period == 5:#Time period is for 5 years
        rateTable=PrettyTable(["Option No.","Bank Name","Rate"])#Table to show rate of interest per bank
        rateTable.add_row(["1","SBI","3%"])
        rateTable.add_row(["2","AXIS","4%"])
        rateTable.add_row(["3","HDFC","3.5%"])
        rateTable.add_row(["4","HSBC","5%"])
        rateTable.add_row(["5","KOTAK","4.5%"])
        print(rateTable)#Printing rate table
        print("Select the bank for loan(",var,"interest may vary")
        rate=[3,4,3.5,5,4.5]#List for rate
        r=int(input("Please enter the number corresponding to the bank chosen\n"))
        period = 5
        adp=p-down_payment#Subtracting down payment from the price
        print("Price to be paid after down payment ₹ ",adp)
        interest = (adp * period * rate[r-1])/100#Calculating interest
```

```
            interest = (adp * period * rate[r-1])/100#Calculating interest
            print("The interest for 1 year will be ₹ ",interest,"\n Therefore interest for 5 years ₹ ",(interest*5))
            total_amount = adp + (interest*5)#Aadding interest to the remaing amount
            emi=total_amount/60#Dividing to get per month payment
            print("Hence total amount will be ₹ ",total_amount,"\nThe amount to be paid per month for 5 years ₹ ",emi)
            payTable=PrettyTable(["Car Name","Car Price","Down Payment","Interest for 12 Months","Total After Down Payment","EM
            payTable.add_row([name,p,down_payment,interest,total_amount,emi])
            print(payTable)#Printing the table
        else:#If the input down payment is less than 30% it will show invalid
            print("Please enter a valid downpayment")
            type_payment(y,p,name)#Calling the function to re-enter the down payment
car_lst=['Suzuki Swift','Kia Seltos','Toyota Innova','Ford Ecosport','Hyundai Creta','MG Hector','Honda City','Toyota Fortuner','Ta
myTable=PrettyTable(["Option No.","Car Name","Car Price","Minimum Down Payment"])#Creating a table using prettytable
myTable.add_row(["1","Suzuki Swift","₹5,00,000","₹1,50,000"])
myTable.add_row(["2","Kia Seltos","₹14,00,000","₹4,20,000"])
myTable.add_row(["3","Toyota Innova","₹30,00,000","₹9,00,000"])
myTable.add_row(["4","Ford Ecosport","₹12,00,000","₹3,60,000"])
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myTable.add_row(["6","MG Hector","₹18,00,000","₹5,40,000"])
myTable.add_row(["7","Honda City","₹15,00,000","₹4,50,000"])
myTable.add_row(["8","Toyota Fortuner","₹40,00,000","₹12,00,000"])
myTable.add_row(["9","Tata Safari","₹19,00,000","₹5,70,000"])
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print(myTable)#Printing the table
c_name = int(input("Enter the option of the car\n"))#Taking input from user for the choice of car
c_name=c_name-1#-1 because list starts with 0
car_name(car_lst[c_name])#Calling the function car_name()
x=[500000,1400000,3000000,1200000,1500000,1800000,1500000,4000000,1900000,1300000]#List of prices for the cars
initial_cost(x[c_name])#The same number input is used for the car choosen
print("Enter 1 for cheque/cash payment 2 for emi payment")#Displaying options for payment method
l=int(input("enter payment method\n"))#Taking input from the user
type_payment(l,x[c_name],car_lst[c_name])#Calling the function typr_payment()
```

Code :

```
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    bdp=(30*p)/100#storing 30% of cost in a varible bdp
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cheque ₹ ',t)
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                print(rateTable)#Printing rate table
                print("Select the bank for loan",var,"interest may vary ")
                rate=[6,8,7,6.5,8.5]#List for rate
```

```
            r=int(input("Please enter the number corresponding to the bank
chosen\n"))#Taking user input for choice of bank
            period = 1
            adp=p-(down_payment)#Subtracting down payment from the price
            print("Price to be paid after down payment ₹ ",adp)
            interest = (adp * period * rate[r-1])/100#Calculating interest
            print("The interest for 1 year will be ₹ ", interest )
            total_amount = adp + interest#Aadding interest to the remaing
amount
            emi=total_amount/12#Dividing to get per month payment
            print(" Hence total amount will be ₹ ", total_amount,"The amount to
be paid per month for 1 year ₹ ",emi)
            payTable=PrettyTable(["Car Name","Car Price","Down
Payment","Interest for 12 Months","Total After Down Payment","EMI"])#Table to
show the user choices and payments

payTable.add_row([name,p,down_payment,interest,total_amount,emi])
            print(payTable)#Printing the table
        elif emi_period == 5:#Time period is for 5 years
            rateTable=PrettyTable(["Option No.","Bank Name","Rate"])#Table to
show rate of interest per bank
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            print(rateTable)#Printing rate table
            print("Select the bank for loan(",var,"interest may vary")
            rate=[3,4,3.5,5,4.5]#List for rate
            r=int(input("Please enter the number corresponding to the bank
chosen\n"))
            period = 5
            adp=p-down_payment#Subtracting down payment from the price
            print("Price to be paid after down payment ₹ ",adp)
            interest = (adp * period * rate[r-1])/100#Calculating interest
            print("The interest for 1 year will be ₹ ",interest,"\n Therefore interest
for 5 years ₹ ",(interest*5))
            total_amount = adp + (interest*5)#Aadding interest to the remaing
amount
            emi=total_amount/60#Dividing to get per month payment
            print("Hence total amount will be ₹ ",total_amount,"\nThe amount to
be paid per month for 5 years ₹ ",emi)
            payTable=PrettyTable(["Car Name","Car Price","Down
Payment","Interest for 12 Months","Total After Down Payment","EMI"])#Table to
show the user choices and payments

payTable.add_row([name,p,down_payment,interest,total_amount,emi])
            print(payTable)#Printing the table
```

```
        else:#If the input down payment is less than 30% it will show invalid
            print("Please enter a valid downpayment")
            type_payment(y,p,name)#Calling the function to re-enter the down
payment
car_lst=['Suzuki Swift','Kia Seltos','Toyota Innova','Ford Ecosport','Hyundai
Creta','MG Hector','Honda City','Toyota Fortuner','Tata Safari','Hyundai
Venue']#List of Cars
myTable=PrettyTable(["Option No.","Car Name","Car Price","Minimum Down
Payment"])#Creating a table using prettytable
myTable.add_row(["1","Suzuki Swift","₹5,00,000","₹1,50,000"])
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myTable.add_row(["6","MG Hector","₹18,00,000","₹5,40,000"])
myTable.add_row(["7","Honda City","₹15,00,000","₹4,50,000"])
myTable.add_row(["8","Toyota Fortuner","₹40,00,000","₹12,00,000"])
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myTable.add_row(["10","Hyndai Venue","₹13,00,000","₹3,90,000"])
print(myTable)#Printing the table
c_name = int(input("Enter the option of the car\n"))#Taking input from user for
the choice of car
c_name=c_name-1#-1 because list starts with 0
car_name(car_lst[c_name])#Calling the function car_name()
x=[500000,1400000,3000000,1200000,1500000,1800000,1500000,4000000,1
900000,1300000]#List of prices for the cars
initial_cost(x[c_name])#The same number input is used for the car choosen
print("Enter 1 for cheque/cash payment 2 for emi payment")#Displaying options
for payment method
l=int(input("enter payment method\n"))#Taking input from the user
type_payment(l,x[c_name],car_lst[c_name])#Calling the function
typr_payment()
```

Output(s):

```
Welcome to XYZ MOTORS
+------------+-----------------+------------+----------------------+
| Option No. |     Car Name    | Car Price  | Minimum Down Payment |
+------------+-----------------+------------+----------------------+
|     1      |   Suzuki Swift  | ₹5,00,000  |      ₹1,50,000       |
|     2      |    Kia Seltos   | ₹14,00,000 |      ₹4,20,000       |
|     3      |  Toyota Innova  | ₹30,00,000 |      ₹9,00,000       |
|     4      |  Ford Ecosport  | ₹12,00,000 |      ₹3,60,000       |
|     5      |  Hyundai Creta  | ₹15,00,000 |      ₹4,50,000       |
|     6      |    MG Hector    | ₹18,00,000 |      ₹5,40,000       |
|     7      |    Honda City   | ₹15,00,000 |      ₹4,50,000       |
|     8      | Toyota Fortuner | ₹40,00,000 |      ₹12,00,000      |
|     9      |   Tata Safari   | ₹19,00,000 |      ₹5,70,000       |
|     10     |   Hyndai Venue  | ₹13,00,000 |      ₹3,90,000       |
+------------+-----------------+------------+----------------------+
Enter the option of the car
1
You are buying  Suzuki Swift
Your cost for buying the car is ₹  500000
Enter 1 for cheque/cash payment 2 for emi payment
enter payment method
```

OUTPUT FOR EMI :

```
You are buying  Suzuki Swift
Your cost for buying the car is ₹  500000
Enter 1 for cheque/cash payment 2 for emi payment
enter payment method
2
PLease make a downpayment which should be more than or equal to 30% of the original car price
Please enter a value for down payment
200000
 Welcome to EMI
### SCHEMES AVAILABLE FOR EMI ###
1 YEAR , 5 YEARS
 Enter the period for emi: 1
+------------+-----------+------+
| Option No. | Bank Name | Rate |
+------------+-----------+------+
|     1      |    SBI    |  6%  |
|     2      |    AXIS   |  8%  |
|     3      |    HDFC   |  7%  |
|     4      |    HSBC   | 6.5% |
|     5      |   KOTAK   | 8.5% |
+------------+-----------+------+
Select the bank for loan % interest may vary
Please enter the number corresponding to the bank chosen
1
```

```
+------------+-----------+------+
| Option No. | Bank Name | Rate |
+------------+-----------+------+
|     1      |    SBI    |  6%  |
|     2      |    AXIS   |  8%  |
|     3      |    HDFC   |  7%  |
|     4      |    HSBC   | 6.5% |
|     5      |   KOTAK   | 8.5% |
+------------+-----------+------+
Select the bank for loan % interest may vary
Please enter the number corresponding to the bank chosen
1
Price to be paid after down payment ₹  300000
The interest for 1 year will be ₹  18000.0
 Hence total amount will be ₹  318000.0 The amount to be paid per month for 1 year ₹  26500.0
+--------------+-----------+--------------+-----------------------+--------------------------+---------+
|   Car Name   | Car Price | Down Payment | Interest for 12 Months | Total After Down Payment |   EMI   |
+--------------+-----------+--------------+-----------------------+--------------------------+---------+
| Suzuki Swift |   500000  |    200000    |        18000.0        |         318000.0         | 26500.0 |
+--------------+-----------+--------------+-----------------------+--------------------------+---------+

Process finished with exit code 0
```

OUTPUT FOR CASH :

```
You are buying  Suzuki Swift
Your cost for buying the car is ₹  500000
Enter 1 for cheque/cash payment 2 for emi payment
enter payment method
1
1=Cheque,2=Cash
1
Total price to pay is ₹  500000
+--------------+-----------+
|   Car Name   | Car Price |
+--------------+-----------+
| Suzuki Swift |   500000  |
+--------------+-----------+
Divide the cheques to 5
Amount to be written per cheque ₹  100000.0

Process finished with exit code 0
```

Conclusion:

Hence this program will help in simplifying the transactions for car dearship showrooms.