**­**

**Fundamentals of Programming**

**(Lab)**

**Project #1**

**Project Title: Car Renting System**

**Submitted To: Muhammad Touqeer Ali**

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**Student Name: Muhammad Arshyan, Muhammad Afnan Shahid, Muzammil Naeem Malik**

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**Reg Number: 2012124, 2012123, 2012137**

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**Project Idea:** Muhammad Afnan Shahid

**Working:** Muzammil Naeem Malik: Complex statements

(Switch Statement, goto statement, cin, cout etc.)

Muhammad Arshyan: Basic statements(If else, cin, cout, variable declaration etc.)+comments

Muhammad Afnan: Basic statements

(Variable declaration, cin, cout, if else)+comments

**Purpose:** The core purpose of this project is to make a user friendly program that makes renting a car easy and convenient.

**Code:**

|  |
| --- |
| #include <iostream>  using namespace std;  int main()  {  int selected\_car1,rent\_car,hours,total\_expense\_before\_depature;// declaring variables  string id\_card\_name\_first,id\_card\_name\_last;    string rent\_Mercedes,rent\_Audi,rent\_BMW,rent\_Lamborghini,rent\_Tesla,rent\_RollsRoyce,rent\_Ford;//The string statement is used to store variables, numbers and characters alike  string selected\_car\_final,selected\_car2;    string final\_car,car\_number\_Mercedes,car\_number\_Audi,car\_number\_BMW,car\_number\_Lamborghini,car\_number\_Tesla,car\_number\_RollsRoyce,car\_number\_Ford;    rent\_Mercedes="500 dollars";// rent of the cars  rent\_Audi="400 dollars";  rent\_BMW="600 dollars";  rent\_RollsRoyce="800 dollars";  rent\_Lamborghini="900 dollars";      cout<<"\t\t\t\t\t|||Welcome to rent a car|||\n"<<endl;//\t provides 8 spaces, \n is used to skip to the next line  cout<<"Please enter your First name : ";// it will show the name of customer on screen  cin>>id\_card\_name\_first;  cout<<"Please enter your Last name : ";  cin>>id\_card\_name\_last;  cout<<"Please select a car from the following list";  cout<<":\n1.Mercedes\n2.Audi\n3.BMW\n4.Lamborghini\n5.Tesla\n6.Rolls-Royce\n7.Ford\n\n";  cout<<"Enter the number before the car to select the car :";// by selecting numbers the details of the car will shown up    cin>>selected\_car1;// if customer selects 1 then that car's details will be shown.  switch (selected\_car1)  {  case 1:  cout<<"You have chosen Mercedes"<<endl;// number 1 car details    cout<<"Do you want to rent the car Mercedes (Y or N)"<<endl;  car\_number\_Mercedes="K9222";  selected\_car2="Mercedes";  rent\_car=500;  final\_car=car\_number\_Mercedes;  break;  case 2:  cout<<"You have chosen Audi"<<endl;// number 2 car details  cout<<"Do you want to rent the car Audi (Y or N)"<<endl;  selected\_car2="Audi";  car\_number\_Audi="IO-D-341";  rent\_car=400;  final\_car=car\_number\_Audi;  break;    case 3:  cout<<"You have chosen BMW"<<endl;// number 3 car details  cout<<"Do you want to rent the car BMW (Y or N)"<<endl;  selected\_car2="BMW";  car\_number\_BMW="C52641";  rent\_car=600;  final\_car=car\_number\_BMW;  break;    case 4:  cout<<"You have chosen Lamborghini"<<endl;// number 4 car details  cout<<"Do you want to rent the car Lamborghini (Y or N)"<<endl;  selected\_car2="Lamborghini";  car\_number\_Lamborghini="DL 1 CS 2444";  rent\_car=800;  final\_car=car\_number\_Lamborghini;  break;    case 5:  cout<<"You have chosen Tesla"<<endl;// number 5 car details  cout<<"Do you want to rent the car Tesla (Y or N)"<<endl;  selected\_car2="Tesla";  car\_number\_Tesla="NO 67 GAS";  rent\_car=650;  final\_car=car\_number\_Tesla;  break;  case 6:  cout<<"You have chosen Rolls-Royce"<<endl;// number 6 car details  cout<<"Do you want to rent the car Rolls-Royce (Y or N)"<<endl;  selected\_car2="Rolls-Royce";  car\_number\_Mercedes="F4TSO";  rent\_car=900;  final\_car=car\_number\_Mercedes;  break;  case 7:  cout<<"You have chosen Ford"<<endl;// number 7 car details  cout<<"Do you want to rent the car Ford (Y or N)"<<endl;  selected\_car2="Ford";  car\_number\_Ford="CMDY 815";  rent\_car=700;  final\_car=car\_number\_Ford;  break;    default:// if the user selects unknown number which didn't exist in the program then this statement will be shown up  cout<<"You have entered wrong number"<<endl;  break;  }    cin>>selected\_car\_final;    if(selected\_car\_final=="Y" or selected\_car\_final=="y") // by selecting Y the car will be finalized  {  cout<<"You have selected "<<selected\_car2<<endl;  }    else if(selected\_car\_final=="N" or selected\_car\_final=="n") // by selecting N the deal gets cancel  {  cout<<"So you don't want to rent the car, well better luck next time\n";  goto label;  }    else  cout<<"You have not selected any car\n"; // if customer didn't select anything then this statement will shown up    cout<<"OK, now please tell us the amount of hours you will be needing the car ";// if the deal gets final then this statement will shown up  cin>>hours;  total\_expense\_before\_depature=rent\_car\*hours;  cout<<"\n\n\t\t\t\t||| Name : "<<id\_card\_name\_first<<" "<<id\_card\_name\_last<<" |||"<<endl;// customer name  cout<<"\t\t\t\t||| Car Name : "<<selected\_car2<<" |||"<<endl;//selected car name  cout<<"\t\t\t\t||| Car Number : "<<final\_car<<" |||"<<endl;// selected car number  cout<<"\t\t\t\t||| Rent accumalated : "<<total\_expense\_before\_depature<<" Dollars |||"<<endl;// rent of the car  label:  return 0;  } |

Output:

