**Q.3** Imagine a tollbooth at a bridge. Cars passing by the booth are expected to pay a 50 cent toll. Mostly they do, but sometimes a car goes by without paying. The tollbooth keeps track of the number of cars that have gone by, and of the total amount of money collected. Model this tollbooth with a class called tollBooth. The two data items are a type unsigned int to hold the total number of cars, and a type double to hold the total amount of money collected. A constructor initializes both of these to 0. A member function called payingCar() increments the car total and adds 0.50 to the cash total. Another function, called nopayCar(), increments the car total but adds nothing to the cash total. Finally, a member function called display() displays the two totals. Make appropriate member functions const. Include a main program to test this class. This program should allow the user to count a paying car, and to count a nonpaying car. One member function should cause the program to print out the total cars and total cash .

**INPUT:**

#include <iostream>

using namespace std;

class tollboth

{ private:

int null,pcar,npcar;

float tax;

public:

tollboth()

{

tax=0;

pcar=0;

npcar=0;

null=1;

}

void paycar(int a)

{

pcar=pcar+a;

for(null;null<=pcar;null++)

{

tax=tax+0.50;

}

}

void nonpay(int b)

{

npcar=npcar+b;

}

void showdata()

{

cout<<"Total no of paying cars are : "<<pcar<<endl;

cout<<"Total tax is : "<<tax<<endl;

cout<<"Total no of nonpaying cars are : "<<npcar<<endl;

}

};

int main()

{

cout<<"KABEER AHMED"<<endl;

cout<<"SE-19028"<<endl;

tollboth tb;

char press,input;

int a,b;

do{

cout<<"Press a for paying cars"<<endl;

cout<<"Press b for nonpaying cars"<<endl;

cin>>press;

switch(press)

{

case 'a':

{

cout<<"Enter No of the paying cars"<<endl;

cin>>a;

tb.paycar(a);

break;

}

case 'b':

{

cout<<"Enter No of nonpayig cars"<<endl;

cin>>b;

tb.nonpay(b);

break;

}

}

cout<<"Press y to continue and total for all Detial"<<endl;

cin>>input;

}

while(input=='y');

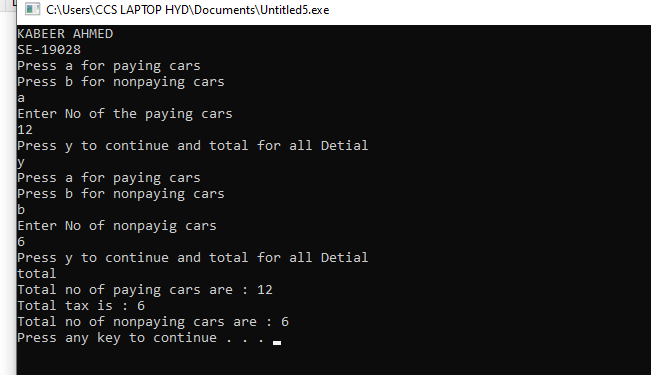
tb.showdata();

system("pause");

return 0;

}

**OUTPUT:**

****