

Answer on Question #38100 –Programming - C++

```
#include <cstdlib>
#include <iostream>

using namespace std;

//main function
int main(int argc, char *argv[])
{
    char ch;//variable for type
    double gallons;//variable for volume of gallons
    double totalPrice=0;

    //A code of 'H' means home use,
    cout<<"H - home use\n";
    //A code of 'C' means commercial use,
    cout<<"C - commercial use\n";
    //A code of 'I' means industrial use.
    cout<<"I - industrial use\n";
    cout<<"Select a type of using: ";
    cin>>ch;;
    cout<<"Enter total gallons ammount: ";
    cin>>gallons;//read total volume of gallons
    switch(ch){
        //Code H:
        //First 100 gallons for $5.00 and $0.005 for each additional gallon used
        case 'h':
        case 'H':
            if(gallons<=100){
                totalPrice=gallons*5;
            }else{
                totalPrice=100*5+(gallons-100)*0.005;
            }
    }
```

```

        break;
//Code C:
//First 400 gallons for $1000.00 and $0.025 for each additional gallon used
    case 'c':
    case 'C':
        if(gallons<=400){
            totalPrice=gallons*1000;
        }else{
            totalPrice=400*1000+(gallons-400)*0.025;
        }
        break;
//Code I:
//First 400 gallons for $1500 and $0.125 for each additional gallon used
    case 'i':
    case 'I':
        if(gallons<=400){
            totalPrice=gallons*1500;
        }else{
            totalPrice=400*1500+(gallons-400)*0.125;
        }
        break;
    default:
        cout<<"\nInvalid input\n";
        break;
}

//show result
cout<<"Total water bill = "<<totalPrice<<"\n\n";
system("PAUSE");//delay
return EXIT_SUCCESS;//return 1
}

```