**23k0800**

**Task 3:**

#include <iostream>

#include <cmath>

using namespace std;

class Sales

{

private:

int SaleID;

string ItemName;

int Quantity;

public:

int GetSaleID()

{

return SaleID;

}

void SetSaleID(int SID)

{

SaleID = SID;

}

string GetItemName()

{

return ItemName;

}

void SetItemName(string name)

{

ItemName = name;

}

int GetQuantity()

{

return Quantity;

}

void SetQuantity(int quantity)

{

Quantity = quantity;

}

Sales() : Quantity(500), ItemName("Brush"), SaleID(235) {}

Sales(int quantity, int saleid, string name) : Quantity(quantity), ItemName(name), SaleID(saleid) {}

Sales(const Sales &tmpobj) : SaleID(tmpobj.SaleID), Quantity(tmpobj.Quantity), ItemName(tmpobj.ItemName) {}

void displayData()

{

cout << "\n Data is given below";

cout << " sale Id: " << SaleID << endl;

cout << "item name: " << ItemName << endl;

cout << " quantity: " << Quantity << endl;

}

~Sales()

{

cout << "\nDestructor has been called";

}

};

int main()

{

Sales obj1, obj2(200, 231, "Toothpaste"), obj3(obj1);

obj1.displayData();

obj2.displayData();

obj3.displayData();

}

**Task 4:**

#include <iostream>

using namespace std;

class Distance

{

private:

float distanceInFeet;

float distanceInInches;

public:

Distance() : distanceInFeet(23.2), distanceInInches(231.5) {}

void setInMeters()

{

float distance;

cout << "\nEnter distance in meters: " << endl;

cin >> distance;

distanceInFeet = distance \* 3.28084;

distanceInInches = distance \* 39.3701;

}

void displayInMeters()

{

cout << "\nDistance in meters: " << distanceInFeet / 3.28084;

}

void displayInFeets(){

cout << "\nDistance in Feets: " << distanceInFeet;

}

~Distance()

{

cout << "\n\nDestructor called" << endl;

}

};

int main()

{

Distance obj;

obj.setInMeters();

obj.displayInMeters();

obj.displayInFeets();

return 0;

}

**Task 5:**

#include <iostream>

#include <string>

using namespace std;

class phone

{

private:

string part1;

string part2;

string part3;

public:

phone(string number)

{

part1 = number.substr(0, 3);

part2 = number.substr(2, 4);

part3 = number.substr(7, 4);

}

void displaynum()

{

cout << "\nYour area code is: " << part1 << endl;

cout << "\nYour Exchange is: " << part2 << endl;

cout << "\nYour Consumer No is: " << part3 << endl;

}

};

int main()

{

string number;

cout << "Please enter you number: ";

cin >> number;

phone num1(number);

num1.displaynum();

return 0;

}