# TASK 1:

**FUNCTION FILE:**

#include<iostream>

using namespace std;

class PersonData

{

public:

string firstName;

string lastName;

string address;

PersonData(){}

//Setter FUnctions

void firstsetter(string firstName);

void lastsetter(string lastName);

void addresssetter(string address);

//Getter Functions

string firstgetter();

string lastgetter();

string addressgetter();

};

class CustomerData : public PersonData

{

public:

int CustomerNumber;

bool MailingList;

CustomerData(){}

//Setter FUnctions

void numbersetter(int number);

void mailsetter(bool mail);

//Getter Functions

int numbergetter();

bool mailgetter();

};

**HEADER FILE:**

#pragma once

#include"Source.cpp"

#include<iostream>

using namespace std;

//Setter Definition

void PersonData::firstsetter(string firstName)

{

this->firstName = firstName;

}

void PersonData :: lastsetter(string lastName)

{

this->lastName = lastName;

}

void PersonData::addresssetter(string address)

{

this->address = address;

}

//Getter Definition

string PersonData::firstgetter()

{

return firstName;

}

string PersonData::lastgetter()

{

return lastName;

}

string PersonData::addressgetter()

{

return address;

}

//Setter Definition

void CustomerData::numbersetter(int number)

{

this->CustomerNumber = number;

}

void CustomerData::mailsetter(bool mail)

{

this->MailingList = mail;

}

//Getter Definition

int CustomerData::numbergetter()

{

return CustomerNumber;

}

bool CustomerData::mailgetter()

{

return MailingList;

} **SOURCE FILE:**

#include<iostream>

#include"Header.h"

using namespace std;

int main()

{

CustomerData c1, c2;

c1.firstsetter("HUZAIFA");

c1.lastsetter("ARSHAD");

c1.addresssetter("SARGODHA");

c1.numbersetter(1);

c1.mailsetter(true);

c2.firstsetter("ALI");

c2.lastsetter("AHMAD");

c2.addresssetter("LAHORE");

c2.numbersetter(2);

c2.mailsetter(false);

cout << "CUSTOMER 1 DETAILS:" << endl;

cout << "First Name: " << c1.firstgetter() << endl;

cout << "Last Name: " << c1.lastgetter() << endl;

cout << "Address: " << c1.addressgetter() << endl;

cout << "Customer Number: " << c1.numbergetter() << endl;

cout << "Mailing List: " << c1.mailgetter() << endl << endl;

cout << "CUSTOMER 2 DETAILS:" << endl;

cout << "First Name: " << c2.firstgetter() << endl;

cout << "Last Name: " << c2.lastgetter() << endl;

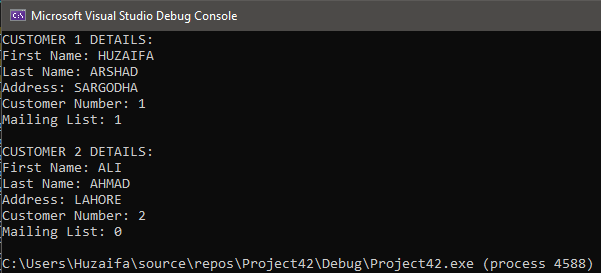
cout << "Address: " << c2.addressgetter() << endl;

cout << "Customer Number: " << c2.numbergetter() << endl;

cout << "Mailing List: " << c2.mailgetter() << endl;

}

# OUTPUT:



# TASK 2:

**FUNCTION FILE:**

#pragma once

#include "Header.h"

//Setter Definition

PersonData::PersonData(){}

void PersonData::firstsetter(string firstName)

{

this->firstName = firstName;

}

void PersonData::lastsetter(string lastName)

{

this->lastName = lastName;

}

void PersonData::addresssetter(string address)

{

this->address = address;

}

//Getter Definition

string PersonData::firstgetter()

{

return firstName;

}

string PersonData::lastgetter()

{

return lastName;

}

string PersonData::addressgetter()

{

return address;

}

//Setter Definition

CustomerData::CustomerData(){}

void CustomerData::numbersetter(int number)

{

this->CustomerNumber = number;

}

void CustomerData::mailsetter(bool mail)

{

this->MailingList = mail;

}

//Getter Definition

int CustomerData::numbergetter()

{

return CustomerNumber;

}

bool CustomerData::mailgetter()

{

return MailingList;

}

//Setter Functions

PrefferedCustomer::PrefferedCustomer(){}

void PrefferedCustomer::purchasesetter(double purchases)

{

this->purchasesAmount = purchases;

}

//Getter Functions

double PrefferedCustomer::purchasegetter()

{

return purchasesAmount;

}

double PrefferedCustomer::discountgetter()

{

int disc;

if (purchasesAmount < 500)

{

return purchasesAmount;

}

else if (purchasesAmount >= 500 && purchasesAmount < 1000)

{

disc = purchasesAmount - (purchasesAmount \* (5 / 100));

return disc;

}

else if (purchasesAmount >= 1000 && purchasesAmount < 1500)

{

disc = purchasesAmount - (purchasesAmount \* (6 / 100));

return disc;

}

else if (purchasesAmount >= 1500 && purchasesAmount < 2000)

{

disc = purchasesAmount - (purchasesAmount \* (7 / 100));

return disc;

}

else if (purchasesAmount >= 2000)

{

disc = purchasesAmount - (purchasesAmount \* (10 / 100));

return disc;

}

}

**HEADER FILE:**

#include<iostream>

#include<string>

using namespace std;

class PersonData

{

public:

string firstName;

string lastName;

string address;

PersonData();

//Setter FUnctions

void firstsetter(string firstName);

void lastsetter(string lastName);

void addresssetter(string address);

//Getter Functions

string firstgetter();

string lastgetter();

string addressgetter();

};

class CustomerData : public PersonData

{

public:

int CustomerNumber;

bool MailingList;

CustomerData();

//Setter FUnctions

void numbersetter(int number);

void mailsetter(bool mail);

//Getter Functions

int numbergetter();

bool mailgetter();

};

class PrefferedCustomer : public CustomerData

{

public:

double purchasesAmount;

double discountLevel;

PrefferedCustomer();

//Setter Functions

void purchasesetter(double purchases);

void discountsetter(double discount);

//Getter Functions

double purchasegetter();

double discountgetter();

}; **SOURCE FILE:**

#include"Header.h"

int main()

{

PrefferedCustomer c1, c2;

c1.firstsetter("HUZAIFA");

c1.lastsetter("ARSHAD");

c1.addresssetter("SARGODHA");

c1.numbersetter(1);

c1.mailsetter(true);

c1.purchasesetter(400);

c2.firstsetter("ALI");

c2.lastsetter("AHMAD");

c2.addresssetter("LAHORE");

c2.numbersetter(2);

c2.mailsetter(false);

c2.purchasesetter(1200);

cout << "CUSTOMER 1 DETAILS:" << endl;

cout << "First Name: " << c1.firstgetter() << endl;

cout << "Last Name: " << c1.lastgetter() << endl;

cout << "Address: " << c1.addressgetter() << endl;

cout << "Customer Number: " << c1.numbergetter() << endl;

cout << "Mailing List: " << c1.mailgetter() << endl;

cout << "Purchases: " << c1.purchasegetter() << endl;

cout << "After Discount: " << c1.discountgetter() << endl << endl;

cout << "CUSTOMER 2 DETAILS:" << endl;

cout << "First Name: " << c2.firstgetter() << endl;

cout << "Last Name: " << c2.lastgetter() << endl;

cout << "Address: " << c2.addressgetter() << endl;

cout << "Customer Number: " << c2.numbergetter() << endl;

cout << "Mailing List: " << c2.mailgetter() << endl;

cout << "Purchases: " << c2.purchasegetter() << endl;

cout << "After Discount: " << c2.discountgetter() << endl << endl;

}

# OUTPUT:

