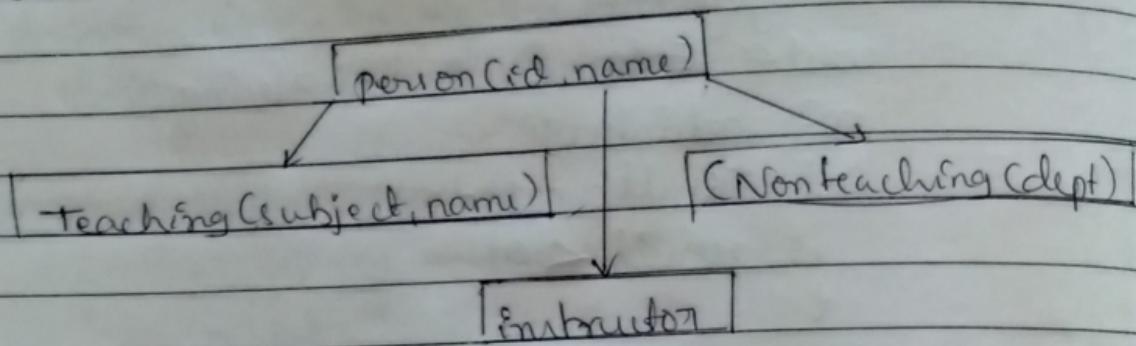


H-Jan 22

WEEK 6: INHERITANCE AND VIRTUAL BASE CLASS

1. Design the class using following hierarchical inheritance teaching. Each class has member function accept and display. Write a program to accept details of n instructors and display the details.



Program:

// Author Name: Al-Fareed

// Reg No: 210970049

// Date of Creation: H-Jan-2022

// Program Name: Program to accept & details of
// n instructors.

//

#include <iostream>

using namespace std;

class person

{

public: int id;

char name[15];

void get()

{

cout << "Enter Person ID:";

cin >> id;

cout << "Enter Name of the Person:";

cin >> name;

y

void show()

x

cout << "In Person ID: " << id;

cout << "In Name of the Person: " << name;

y

b;

class teaching : public person

x

char sub[10];

char name[10];

public : void get()

z

person:: get()

cout << "Enter the Subject: ";

<n>> sub;

y

void show()

x

person:: show();

cout << "In Subject: " << sub;

y

class nonteach : public person

x

char dept[25];

public : void get()

x

person:: get();

cout << "Enter the department name: ";

<n>> dept;

y

```

void show()
{
    person::show()
    cout << "Department: " << dept;
}

class instructor: public person
{
public: void get()
{
    person::get();
}

void show()
{
    person::show();
}

int main()
{
    instructor i[10];
    nonTeach n[10];
    teaching t[10];
    int n, m, l, flag = 1;
    while (flag)
    {
        cout << "1. Options: 1. Teaching\n"
            "2. Non Teaching 1n 3. Instructor & 1n 4. Exit\n";
        cout << "Enter your choice : ";
        int ch;
        cin >> ch;
        switch(ch)
        {

```

case1: cout<<"Enter the number of teachers:";

מִלְחָמָה

for (int i=0; i<n; i++)

x

t[0].get();

10

“**concern**” Teachers details are :;

```
for (int i=0; i<n; i++)
```

2

```
t[{}].show()
```

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break;

case 2: "contcc" Enter the number of Non

Teaching members: ")

unseen:

for (int i=0; i<m; i++)

4

nt[i].get()

y

comes "Non Teachers decide are":

```
for (int i=0; i<m; i++)
```

2

nt[1].show();

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$\text{SO}_4^{2-} \text{--- --- --- --- --- --- } \text{In}^{3+}$

break

case 3: cont'd "Enter the number of Instructors:-"

גִּילְעָן

center - - - - - - - - - In "

(8F)

```
for(int i=0; i<1; i+1)
```

in[i].get();

4

for (int i=0; i<1; i++)

1

```
in[1]: show();
```

4

(cont'd) In - - - - - ,

break;

else if flag = 0;

break

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4

```
cout << "ln";
```

return 0;

۴

OUTPUT:

Options:

1. Teaching

2. Non Teaching

3. Inductors

4 Euy

Enter your choice: 1

Enter the number of teachers.

Enter Person ID.

Enter Name of the Person: S15

Enter the Person: Shivam
Enter the Subject: English

My subject: English
Teacher details are:

Person ID: 101

Name of the Person: Shivam

Subject: English

Options:

1. Teaching
2. Non Teaching
3. Instructors
4. Exit

Enter your choice: 2

Enter the number Non teaching members:

Enter Person ID: 102

Enter Name of the person: Sham

Enter the Department name: Language

Non Teachers details are:

Person ID: 102

Name of the Person: Sham

Department: Language

Options:

1. Teaching
2. Non Teaching
3. Instructors
4. Exit

Enter your choice: 3

Enter the number of Instructors: 2

Enter Person ID: 103

Enter Name of the Person: Sham

Enter Person ID: 104

Enter Name of the Person: Vilasini

Instructor details are:

Person ID: 103

Name of the Person: Sam

Person ID: 104

Name of the Person: Vibrant

Options:

1. Teaching
2. Non Teaching
3. Instructor.
4. Exit

Enter your choice: 4