/\* B25CE2007

Design an educational Institution that maintains a database of all staff members where the database is segregated into a number of classes having hierarchical relationships. Define all classes with suitable data members and required member functions to build the database and fetch individual details .

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#include <iostream> #include <string> using namespace std;

class staff { protected:

string name; string dept; int staff\_id;

public:

void accept1(); void display1();

};

void staff::accept1() {

cout << "Enter your name: "; getline(cin, name);

cout << "Enter department: "; getline(cin, dept);

cout << "Enter staff id: "; cin >> staff\_id;

cin.ignore(); // clear input buffer after integer input

}

void staff::display1() {

cout << "--- Staff Info ---" << endl;

cout << "Your name is " << name << endl; cout << "Your department is " << dept << endl; cout << "Your staff id is " << staff\_id << endl;

}

class teacher : public staff { private:

string subject;

public:

int experience;

void accept2(); void display2();

};

void teacher::accept2() { accept1();

cout << "Enter your subject: "; getline(cin, subject);

cout << "Enter your experience (years): "; cin >> experience;

cin.ignore(); // clear input buffer after integer input

}

void teacher::display2() { display1();

cout << "Your subject is " << subject << endl;

cout << "Your experience is " << experience << " years" << endl;

}

class support\_staff : public staff { private:

string area\_of\_support;

public:

void accept3(); void display3();

};

void support\_staff::accept3() { accept1();

cout << "Enter your area of support: ";

getline(cin, area\_of\_support);

}

void support\_staff::display3() { display1();

cout << "Your area of support is " << area\_of\_support << endl;

}

int main() {

int tCount, sCount;

cout << "Enter the number of teaching staff: "; cin >> tCount;

cin.ignore(); // clear input buffer after integer input teacher\* teachers = new teacher[tCount];

for (int i = 0; i < tCount; ++i) {

cout << "\nEnter details for teacher " << i + 1 << ":" << endl; teachers[i].accept2();

}

cout << "\n--- Teachers Information ---\n"; for (int i = 0; i < tCount; ++i) {

teachers[i].display2(); cout << endl;

}

cout << "Enter the number of support staff: "; cin >> sCount;

cin.ignore(); // clear input buffer

support\_staff\* supports = new support\_staff[sCount]; for (int i = 0; i < sCount; ++i) {

cout << "\nEnter details for support staff " << i + 1 << ":" << endl; supports[i].accept3();

}

cout << "\n--- Support Staff Information ---\n";

for (int i = 0; i < sCount; ++i) { supports[i].display3();

cout << endl;

}

delete[] teachers; delete[] supports;

return 0;

}

**OUTPUT :**

Enter the number of teaching staff: 1 Enter details for teacher :1

Enter your name: Anuja

Enter department: comp

Enter staff id: 12

Enter your subject: math

Enter your experience (years): 2 Teachers Information ---

Staff Info ---

Your name is Anuja

Your department is comp Your staff id is 12

Your subject is math

Your experience is 2 years