Definitions of Task-1:

```cpp
#include <iostream>
#include <iostring>
#include <conio.h>
#include <cstdlib>
using namespace std;
int nationality, gender, degree, choice;
struct Adress {
String city, street;
};
struct Foreigner {
int f_visitorNo, f_PassPortNo;
};
Struct National {
int n_cnic, n_familyNo;
};
union PersonType {
    Foreigner p_foreigner;
    National  p_national;
};
enum GENDER {
    male = 0, female = 1
};
```

```cpp
Struct Person {
    String P_name;
    int P_age;
    Adress P_adress;
    PersonType P_type;
    GENDER P_gender;
    String P_adegrees[3];
    int Person_Record[5];

};

void cout PersonRecord (Person Person)
{

cout << "Your name is:" << Person.P_name << endl;
cout << "Your age is:" << Person.P_age << endl;
cout << "Your city name is:" << Person.P_adress city << endl;
cout << "Your sheet name is:" << Person.P_adress shreet << endl;

if (nationality == 1)
{

cout << "your visitor_number is:" << Person.P_type.P_foreigner.f_visiterNo << endl;
cout << "Your Passport_number is:" << Person.P_type.P_foreigner.f_PassportN << endl;

}

else if (choice == 1) { // for edit function
    cout << "You are foreigner" << Person.P_type.P_foreigner.f_visiterNo
cout << "Your visitor_number is:" << Person.P_type.P_foreigner.f_visiterNo << endl;
cout << "Your PassPort_number is:" << Person.P_type.P_foreigner.f_PassportN
```

```
else if (choice ==2) {   // for edit function
cout<<" You   are National:<<Person P-type P-national n-cnic
cout<<" Your cnic number is:<<Person.P-type.P-national.n-cnic<<endl;
cout<<" Your famil number is:<<Person-P-type.P-national.n-familyNo<<endl;
        }

else {

cout << "Your cnic number is:<<Person. p-type- P-national .n-cnic<<endl;
cout << "Your famil number is:<<Person-p-type- P-national. n-familyNo<< endl;
        }

if (gender ==0) {
  cout << " You are male"<< endl;
        }

else {
  cout << "You are female"<< endl;
  cout << "your degrees which you are select:<< endl
  for (int i= 0 1<3 i++)
        {
        cout << Person P-degrees[i]<<endl;
        }
    }
}
```

```cpp
void editPersonRecord (Person &person)
{
    int selection, variable;
    cout << "how many variables do you edit";
    cin >> variable;
    for (int i=0; i < variable; i++)
    {
        cout << "IF you want to edit your details then Press"
        cout << "->1 for edit name" << endl;
        cout << "->2 for edit age" << endl;
        cout << "->3 for edit city" << endl;
        cout << "->4 for edit street" << endl;
        cout << "->5 for edit nationality" << endl;
        cout << "->6 for edit degree" << endl;
        cin >> selection;
        if (selection == 1) {
            cout << "Edit your name" << endl;
            cin >> person.P_name;
        }

        else if (selection == 2) {
            cout << "Edit your age" << endl;
            cin >> person.P_age;
        }
```

```
else if (selection ==3) {
    cout << " Edit your city name << endl;
    cout cin >> Person. P_adress. city;
}

else if (selection ==4) {
    cout << " Edit your sheet name << endl;
    cin >> Person. P_adress. street;
}

else if (selection == 5) {
cout << " if you want change nationality
    then enter 1 for foreigner o 2 for national" << endl;
cin >> choice;
        if (choice == 1) {
cout << " Edit your visitor and Passport No" << endl;
cin >> Person. P_type. P_foreigner. f_visitor No;
cin >> Person. P_type. P_foreigner. f_Passport No;
}

    else if (choice == 2) {
cout << " Edit your cnic and family number" << endl;
cin >> Person. P_type. P_National. n_cnic;
cin >> Person. P_type. P_National. n_family No;
}
```

```
        else if ( selection == 6) {
        cout << " Edit your degree << endl;
        cout << " How many degree you want to change << endl;
        cin >> degrees ;
        for (int i=0; i< degree; i++)
        {
        cin >> Person . P_degrees [i];
        }
        }

    else {
        cout << " Invalid entry" << endl ;
        }
    }
  }
```

Main file => 2023-535-task-1.

```cpp
#include "2023535_definitions-1.cpp"
using namespace std;
int main()
{
    Person P1
    cout
    getline
    cout << " Enter your name" << endl;
    cin >> cin. P1 P-name;
    cout << " Enter your age" << endl;
    cin >> " P1. P-age;
    cout << " Enter your city" << endl;
    cin >> P1. P-adress. city;
    cout << " Enter your street" << endl;
    cin >> P1. P-adress. Street;
    cout << " Enter 1 for foreigner 2 for National" << endl;
    cin >> nationality;
    if (nationality == 1) {
    cout << " Enter your visitor and Passport No: << endl;
    cin >> P1. P-type. P foreigner. f-visitor No;
    cin >> P1. P-type. P-foreigner. f-Passport No;
    }
}
```

```cpp
else if (nationality == 2) {
    cout << "Enter your cnic and family No" << endl;
    cin >> P1.P_type.P_foreigner.National . ncnic;
    cin >> P1.P_type.P_National . n_family No;
}

cout << "Enter 0 for male and 1 for female" << endl;
cin >> gender;
Gender choose;
{

    case 0:
        choose = male;
        break;
    case 1:
        choose = female;
}

cout << "In how many degrees you want to enroll" << endl;
cin >> degree;
cout << "Write your degree name" << endl;
for ( int i = 0; i < degree; i++) {
    cin >> P1.P_degrees [i];
}

}o
```

```
cout Person Record (P1);
edit Person Record (P1);
cout Person Record (P1);


return 0;
}
```