```cpp
#include <iostream>
using namespace std;

int main() {
    //Task1: Asks the users to select a number from 1-4 each corresponding to a specific province and uses switch-case to give the population of each province

    int num;
    cout << "1) Punjab" << endl;
    cout << "2) KPK" << endl;
    cout << "3) Sindh" << endl;
    cout << "4) Balochistan" << endl;
    cout << "Enter the number of the province you want to choose ";
    cin >> num;
    switch (num) {
    case 1:
        cout << "127,688,922" << endl; //Population of Punjab
        break;
    case 2:
        cout << "40,856,097" << endl; //Population of KPK
        break;
    case 3:
        cout << "55,696,147" << endl; //Population of Sindh
        break;
    case 4:
        cout << "14,894,402" << endl; //Population of Balochistan
    default:
        cout << "Enter any number from 1-4" << endl; //This output is given if any number other than 1,2,3, and 4 is given
    }

    //Task2: Uses switch case method to determine if a given letter from a user is a vowel or consonant
    char letter;
    cout << "Enter an alphabet ";
    cin >> letter;
    switch (letter) {
    case 'a':       //Both the uppercase and lowercase letters are written in case depending on how the user types the letters
    case 'A':
    case 'e':
    case 'E':
    case 'i':
    case 'I':
    case 'o':
    case 'O':
    case 'u':
    case 'U':
        cout << "This is a vowel" << endl;
        break;
    default:
        cout << "This is a consonant" << endl;


    }

    //Task3: Takes a given number from a user and uses switch-case to determine if the number is 0, positive or negative
    int x;
    cout << "Enter a number ";
    cin >> x;
    switch (x > 0) {               //We are primarily going to consider the condition of if x is greater than 0, as in it's positive
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    case true:                      //True means x is greater than 0 (is positive)
        cout << "This is a positive number" <<endl;
        break;
    case false:                     //False means x is not greater than 0 (it is
negative)
        cout << "This is a negative number" <<endl;
        break;
    default:                        //If the number is neither greater or less
than 0, it's zero
        cout << "This is 0" << endl;
    }



    //Task4: Uses nested if-else statements to check if a person is a child,
adult or teenager given their age
    int age;
    cout << "Enter the age: ";
    cin >> age;
    if (age >= 0) {  //This is

        if (age >= 13) {
            //Given that the age is greater than or equal to 0 in the previous if
statement, it checks if the age is greater than or equal to 13 to check if it's a
teenager

            cout << "This person is a teenager" << endl;
        }
        else if (age >= 18) //If the age is not 13 or above, then it checks if
its 18 or above to see if its an adult

        {
            cout << "This person is an adult" << endl;

        }
        else {
            cout << "This is a child" << endl;
        }

    }

    //Task5: Uses nested if else statements to determine which of the given 3
numbers, a, b and c are the greatest
    int a, b, c;
    cout << "Enter 3 numbers: ";
    cin >> a >> b >> c;
    if (a > b) {
        if (b > c) {
            cout << "The greatest number is " << a << endl;
        }

    }
    else if (b > a) {
        if (a > c) {
            cout << "The greatest number is " << b << endl;
        }
    }

    else if (c > b) {
        if (b > a) {
            cout << "The greatest number is " << c << endl;
        }
    }
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    else {  //When neither of the numbers are greater or lesser than the others,
that means they are equal
        cout << "All the numbers are equal" << endl;
    }



    //Task6: Uses nested if-else statement to check if a given letter is a vowel
or consonant
    char l;
    cout << "Enter a letter ";
    cin >> l;
    if (l >= 'a' || l <= 'z' || l >= 'A' || l <= 'Z')

    {   //Meaning check if a letter is equal to or greater than 'a' or equal
to/lesser than 'z'. If it is, then check if it is a vowel or not
        if (l == 'a' || l == 'e' || l == 'i' || l == 'o' || l == 'u' || l == 'A'
|| l == 'E' || l == 'I' || l == 'O' || l == 'U') {
            cout << "This is a vowel";

    }

    }
    else {         //By default if its not equal to a vowel, then its a consonant
        cout << "This is a consonant";
    }


    return 0;

}
```