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Task 1

```
[*] population.cpp
      #include <iostream>
 2
      using namespace std;
 3 = int main(){
 4
          char Prov;
 5
          cout<<"Enter intials of name of any province of Pakistan..."<<endl;</pre>
 6
          cin>>Prov;
 7 🗀
          switch (Prov){
 8
              case 'P':
 9
              cout<<"Population of Punjab is 110 Million!"<<endl;</pre>
10
              case 'S' :
11
12
              cout<<"Population of Sindh is 47.9 Million!"<<endl;</pre>
13
14
              cout<< "Populatipon of Khyber Pakhtunkhwa is 40.8 Million!"<<endl;
15
16
              break;
17
                   case 'B':
              cout<<"Population of Balochistan is 12.34 Million!"<<endl;</pre>
18
19
20
              default :
              cout<<"Kindly, insert correct initial on province"<<endl;</pre>
21
22
23
24
25
26
          return 0;
27
```

In above task, we take initials of any province of a country, then population of that province is displayed.

Task 2

```
#include <iostream>
     using namespace std;
3 = int main(){
         char alphabet;
5
          cout<<"Enter a Alphabet: "<<endl;
6
         cin>>alphabet;
7 🖃
          switch (alphabet){
              case 'a' : case 'e' : case'i' : case 'o' : case 'u' :
8
9
              cout<<"Given alphabet is Vowel!!"<<endl;</pre>
10
              break;
11
              default :
              cout<<"Your inserted alphabet is consonant!"<<endl;</pre>
12
13
14
15
         }
16
17
18
         return 0;
19
20
21
22
23
```

in this code, a character is taken as input and is checked whether it is vowel or consonant

Task 3

```
population.cpp
     #include <iostream>
     using namespace std;
3 ☐ int main(){
4
          int number;
          cout<<"Enter any number!"<<endl;</pre>
5
6
          cin>>number;
7
8 🖨
          switch(number){
              case 0:
              cout<<"Given number is zero!"<<endl;</pre>
10
11
              break;
12
              default :
13
14 🗀
                  if (number<0){
15
16
                  cout<<"Your number is negative"<<endl;</pre>
17
18
                  }else {
19
20
                       cout<<"Your number is positive"<<endl;</pre>
21
22
23
24
25
26
27
28
     return 0;
29
30
31
32
```

In this code, a number is taken as input and it is decide that if it zero or positive or negative numbr.

Task 4

```
raiacionicpp
      #include <iostream>
      using namespace std;
   int main(){
          int age;
          cout<<"Enter your age!"<<endl;</pre>
          cin>>age;
          if (age<20){
         if(age>13){
         cout<<"you are teenager"<<endl;</pre>
      }else{
          cout<<"you are kiddo"<<endl;
     else{
              cout<<"you are adult"<<endl;
      return 0;
 C:\Users\Hp\Documents\population.exe
Enter your age!
32
you are adult
Process exited after 1.434 seconds with return value 0
Press any key to continue \dots
```

in this code, age is taken as input and it is decide if he is adult ,teenage or a kid.

Task 5

```
population.cpp
   #include <iostream>
   using namespace std;
int main() {
      double num1, num2, num3;
      // Input three numbers from the user
      cout << "Enter the first number: ";
      cin >> num1;
      cout << "Enter the second number: ";
      cin >> num2;
      cout << "Enter the third number: ";
      cin >> num3;
      // Finding the greatest number using nested if-else statements
      if (num1 >= num2) {
           if (num1 >= num3) {
               cout << "The greatest number is: " << num1 << endl;
               cout << "The greatest number is: " << num3 << endl;
       } else {
           if (num2 >= num3) {
               cout << "The greatest number is: " << num2 << endl;
           } else {
               cout << "The greatest number is: " << num3 << endl;
       return 0;
```

In above code, three numbers are taken as input and decide which is the biggest number.

Task 6

```
[*] population.cpp
    1
          #include <iostream>
    2
          using namespace std;
    3
    4 = int main() {
     5
                char x;
     6
    7
                cout << "Enter an alphabet: ";
                cin >> x;
    8
    9
   10日
               if (x >= 'a' && x <= 'z') {
   if (x == 'a' || x == 'e' || x == 'i' || x == 'o' || x == 'u') {
     cout <<x<< " is a Vowel." << endl;</pre>
   11
   12
   13
   14
                          cout <<x << " is a Consonant." << endl;
   15
   16
                     cout << "Invalid input. Please enter a lowercase alphabet letter." << endl;</pre>
   17
   18
   19
   20
                return 0;
   21 - }
 (globals)
ses 📗 🔃 C:\Users\Hp\Documents\population.exe
                                                                                                           \times
    nter an alphabet: b
    Process exited after 3.617 seconds with return value 0
    ress any key to continue . . .
```

in this code, it is decide that whether the alphabet which is taken as input is vowel or consonant.