

FOP Lab manual 3 Home Tasks

Task 1:

main.cpp	Output
<pre>1 #include <iostream> 2 using namespace std; 3 4 int main() { 5 int choice; 6 7 cout << "Choose a province:\n"; 8 cout << "1. Punjab\n"; 9 cout << "2. Sindh\n"; 10 cout << "3. KPK\n"; 11 cout << "4. Balochistan\n"; 12 cout << "Enter your choice (1-4): "; 13 cin >> choice; 14 15 switch(choice) { 16 case 1: 17 cout << "Total population of Punjab: 110,012,442" 18 << endl; 19 break;</pre>	<pre>/tmp/1L26Le8nIN.o Choose a province: 1. Punjab 2. Sindh 3. KPK 4. Balochistan Enter your choice (1-4): 3 Total population of KPK: 35,525,047</pre>

main.cpp	Output
<pre>18 break; 19 case 2: 20 cout << "Total population of Sindh: 47,886,051" << 21 endl; 22 break; 23 case 3: 24 cout << "Total population of KPK: 35,525,047" << 25 endl; 26 break; 27 case 4: 28 cout << "Total population of Balochistan: 12,344 29 ,408" << endl; 30 break; 31 default: 32 cout << "Invalid choice!" << endl; 33 break; 34 } 35 36 return 0; 37 }</pre>	<pre>/tmp/1L26Le8nIN.o Choose a province: 1. Punjab 2. Sindh 3. KPK 4. Balochistan Enter your choice (1-4): 3 Total population of KPK: 35,525,047</pre>

Task 2:

main.cpp	Run	Output
<pre>1 #include <iostream> 2 using namespace std; 3 4 int main() { 5 char alphabet; 6 7 cout << "Enter an alphabet: "; 8 cin >> alphabet; 9 10 switch(tolower(alphabet)) { 11 case 'a': 12 case 'e': 13 case 'i': 14 case 'o': 15 case 'u': 16 cout << alphabet << " is a vowel." << endl; 17 break; 18 default: 19 cout << alphabet << " is a consonant." << endl; 20 break;</pre>		<pre>/tmp/1L26Le8nIN.o Enter an alphabet: j j is a consonant.</pre>

Task 3:

main.cpp	Run	Output
<pre>1 #include <iostream> 2 using namespace std; 3 4 int main() { 5 int number; 6 7 cout << "Enter a number: "; 8 cin >> number; 9 10 switch(number > 0 ? 1 : (number < 0 ? -1 : 0)) { 11 case 1: 12 cout << "The number is positive." << endl; 13 break; 14 case -1: 15 cout << "The number is negative." << endl; 16 break; 17 case 0: 18 cout << "The number is zero." << endl; 19 break;</pre>		<pre>/tmp/1L26Le8nIN.o Enter a number: 8 The number is positive.</pre>

Task 4:

main.cpp	Run	Output
<pre>1 #include <iostream> 2 using namespace std; 3 4 int main() { 5 int age; 6 7 cout << "Enter your age: "; 8 cin >> age; 9 10 if (age >= 18) { 11 cout << "You are an adult." << endl; 12 } else if (age >= 13 && age <= 17) { 13 cout << "You are a teenager." << endl; 14 } else { 15 cout << "You are a child." << endl; 16 } 17 18 return 0; 19 }</pre>		<pre>/tmp/6Rqz9hgINE.o Enter your age: 18 You are an adult.</pre>

Task 5:

main.cpp	Run	Output
<pre>1 #include <iostream> 2 using namespace std; 3 4 int main() { 5 int num1, num2, num3; 6 7 cout << "Enter three numbers: "; 8 cin >> num1 >> num2 >> num3; 9 10 if (num1 >= num2) { 11 if (num1 >= num3) { 12 cout << num1 << " is the greatest number." << endl; 13 } else { 14 cout << num3 << " is the greatest number." << endl; 15 } 16 } else { 17 if (num2 >= num3) { 18 cout << num2 << " is the greatest number." << endl; 19 } else { 20 cout << num3 << " is the greatest number." << endl; 21 } 22 } 23 }</pre>		<pre>/tmp/6Rqz9hgINE.o Enter three numbers: 6, 5, 3 6 is the greatest number.</pre>

Task 6:

main.cpp	Run	Output
<pre>1 #include <iostream> 2 using namespace std; 3 4 int main() { 5 char alphabet; 6 7 cout << "Enter an alphabet: "; 8 cin >> alphabet; 9 10 if (alphabet == 'a' alphabet == 'e' alphabet == 'i' alphabet == 'o' alphabet == 'u' 11 alphabet == 'A' alphabet == 'E' alphabet == 'I' alphabet == 'O' alphabet == 'U') { 12 cout << alphabet << " is a vowel." << endl; 13 } else { 14 cout << alphabet << " is a consonant." << endl; 15 } 16 17 return 0;</pre>		<pre>/tmp/HL7snbcNCy.o Enter an alphabet: d d is a consonant.</pre>