

CS LAB Assignment 3

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TASK 1

```
main.cpp F9
1  #include <iostream>
2  using namespace std;
3  int main(){
4      char province;
5      cout << "Enter the first letter of the province: ";
6      cin >> province;
7      switch (province){ /*take first letter of province as input and use switch case
8                          to output their population*/
9          case 'b':
10             cout << "Population: 12,335,129";
11             break;
12          case 'p':
13             cout << "Population: 109,989,655";
14             break;
15          case 's':
16             cout << "Population: 47,854,510";
17             break;
18          case 'k':
19             cout << "Population: 30,508,920";
20             break;
21          default:
22             cout << "Not a province.";
23             break;
24      }
25      return 0;
26  }
```

input

```
Enter the first letter of the province: p
Population: 109,989,655

...Program finished with exit code 0
Press ENTER to exit console.
```

TASK 2

```
main.cpp
1  #include <iostream>
2  using namespace std;
3
4  int main()
5  {
6      char letter;
7      cout << "Enter letter: ";
8      cin >> letter;
9
10     switch (letter){ /* using switch case to check if the letter
11                       is a vowel or not*/
12
13         case 'a': case 'e': case 'i': case 'o': case 'u':
14             cout << "It's a vowel.";
15             break;
16
17         default:
18             cout << "It's a consonent.";
19             break;
20     }
21
22     return 0;
23 }
```

input

```
Enter letter: i
It's a vowel.

...Program finished with exit code 0
Press ENTER to exit console.
```

TASK 3

```
main.cpp
1  #include <iostream>
2  using namespace std;
3  int main()
4  {
5      int number;
6      cout << "Enter number: ";
7      cin >> number;
8      switch (number > 0){ /* Using nested switch case to check if
9                           number is positive, negative
10                          or equal to zero*/
11          case true:
12              cout << "Positive";
13              break;
14
15          switch (number < 0)
16              case true:
17                  cout << "Negative";
18                  break;
19
20              case false:
21                  cout << "Equal to zero";
22                  break;
23      }
24      return 0;
25  }
```

input

```
Enter number: 8
Positive

...Program finished with exit code 0
Press ENTER to exit console.
```

TASK 4

```
main.cpp
1  #include <iostream>
2  using namespace std;
3
4  int main()
5  {
6      int age;
7      cout << "Enter your age: ";
8      cin >> age;
9      // using nested if conditions to declare the age group if age is given
10     if (age < 18){
11         if (age <= 12){
12             cout << "You're a child.";
13         }
14         else {
15             cout << "You're a teenager.";
16         }
17     }
18     else {
19         cout << "You are an adult.";
20     }
21     return 0;
22 }
```

input

```
Enter your age: 18
You are an adult.

...Program finished with exit code 0
Press ENTER to exit console.
```

TASK 5

main.cpp

```
1  #include <iostream>
2  using namespace std;
3  int main()
4  {
5      int a, b , c;
6      cout << "Enter 3 numbers: ";
7      cin >> a >> b >> c;
8
9      if (a > b){
10         if (a > c){
11             cout << a << " is largest";
12         }
13         else{
14             cout << c << " is largest";
15         }
16     }
17     else {
18         if (b > c){
19             cout << b << " is largest";
20         }
21         else {
22             cout << c << " is largest";
23         }
24     }
25     return 0;
26 }
```



input

Enter 3 numbers: 78

45

69

78 is largest

...Program finished with exit code 0

TASK 6

```
main.cpp
1  #include <iostream>
2  using namespace std;
3
4  int main()
5  {
6      char letter;
7      cout << "Enter a letter: ";
8      cin >> letter;
9
10     if (letter == 'a' || 'e' || 'i' || 'o' || 'u'){
11         if (letter == 'A' || 'E' || 'I' || 'O' || 'U'){
12             cout << "It's a Vowel";
13         }
14     }
15     else {
16         cout << "It's a consonent.";
17     }
18     return 0;
19 }
```

inp

```
Enter a letter: i
It's a Vowel

...Program finished with exit code 0
Press ENTER to exit console.
```