

LAB ASSIGNMENT

Submitted To:

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Task #01

```
#include <iostream>
using namespace std;
int main() {
    char province;
    int population;

    cout << "Enter the first letter of the province (P, S, K, B): ";
    cin >> province;

    switch (province) {
        case 'P':

            population = 110012442; // Population of Punjab
            break;
        case 'S':

            population = 47886041; // Population of Sindh
            break;
        case 'K':

            population = 30874180; // Population of Khyber Pakhtunkhwa (KPK)
            break;
        case 'B':

            population = 12805137; // Population of Balochistan
            break;
        default:
            cout << "Invalid province code." << std::endl;
    }

    cout << "Population of the selected province: " << population << endl;

    return 0;
}
```



```
Microsoft Visual Studio Debug Console
Enter the first letter of the province (P, S, K, B): K
Population of the selected province: 30874180

C:\Users\Misbah\source\repos\ConsoleApplication8\x64\Debug\ConsoleApplication8.exe (process 22680) ex
Press any key to close this window . . .|
```

Task #02

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

int main() {
    char character;

    cout << "Enter a character: ";
    cin >> character;

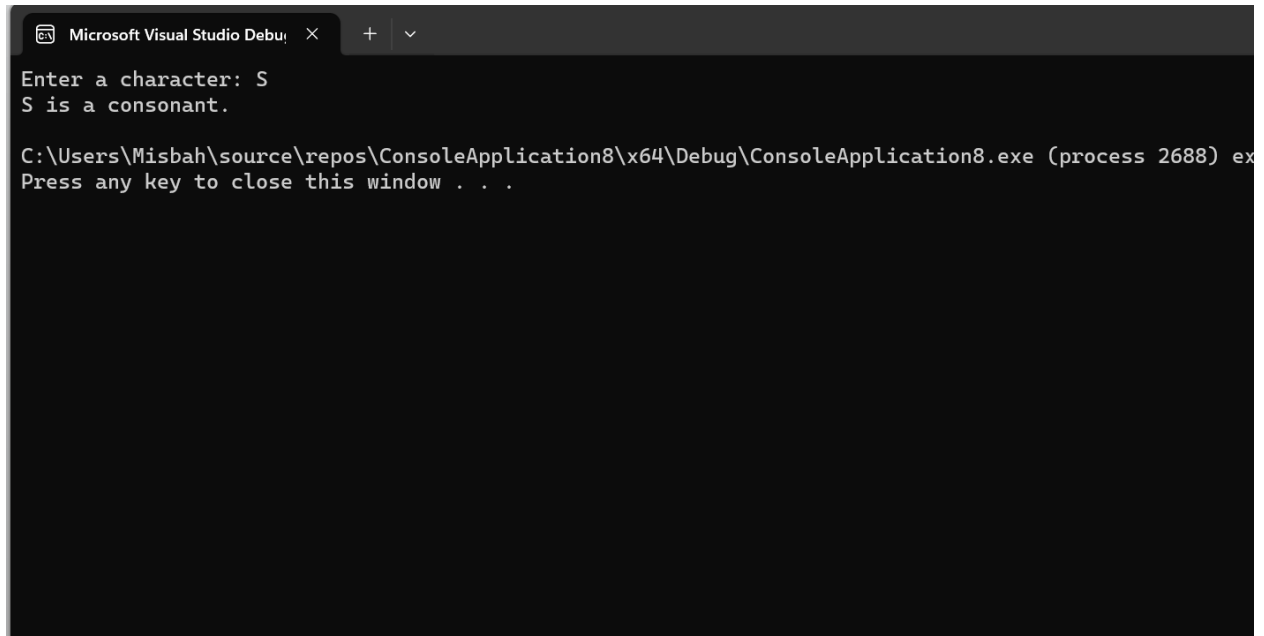
    switch (character) {
        case 'a':
        case 'e':
        case 'i':
        case 'o':
        case 'u':
        case 'A':
        case 'E':
        case 'I':
        case 'O':
        case 'U':
            cout << character << " is a vowel." << endl;
            break;
```



```

default:
    cout << character << " is a consonant." << endl;
}
return 0;
}

```



```

Microsoft Visual Studio Debug Console
Enter a character: S
S is a consonant.

C:\Users\Misbah\source\repos\ConsoleApplication8\x64\Debug\ConsoleApplication8.exe (process 2688) ex
Press any key to close this window . . .

```

Task #03

```

#include <iostream>
using namespace std;

int main() {
    int num;

    cout << "Enter a digit: ";
    cin >> num;

    if (num > 0) {
        cout << "The digit is positive." << endl;
    }
    else if (num < 0) {
        cout << "The digit is negative." << endl;
    }
    else {
        cout << "The digit is zero." << endl;
    }

    return 0;
}

```



```
Microsoft Visual Studio Debug Console
Enter a digit: -5
The digit is negative.

C:\Users\Misbah\source\repos\ConsoleApplication8\x64\Debug\ConsoleApplication8.exe (process 15236) exited
Press any key to close this window . . .
```

Task #04

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

int main() {
    int age;

    cout << "Enter your age: ";
    cin >> age;

    if (age >= 18) {
        cout << " You are an adult." << endl;
    }
    else if (age >= 13) {
        cout << " you are teenager." << endl;
    }

    else {
        cout << "you are a child" << endl;
    }

    return 0;
}
```



```
Microsoft Visual Studio Debug Console
Enter your age: 45
You are an adult.

C:\Users\Misbah\source\repos\ConsoleApplication9\x64\Debug\ConsoleApplication9.exe (process 20916) exited
Press any key to close this window . . .
```

Task #05

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

int main() {
    double num1, num2, num3;

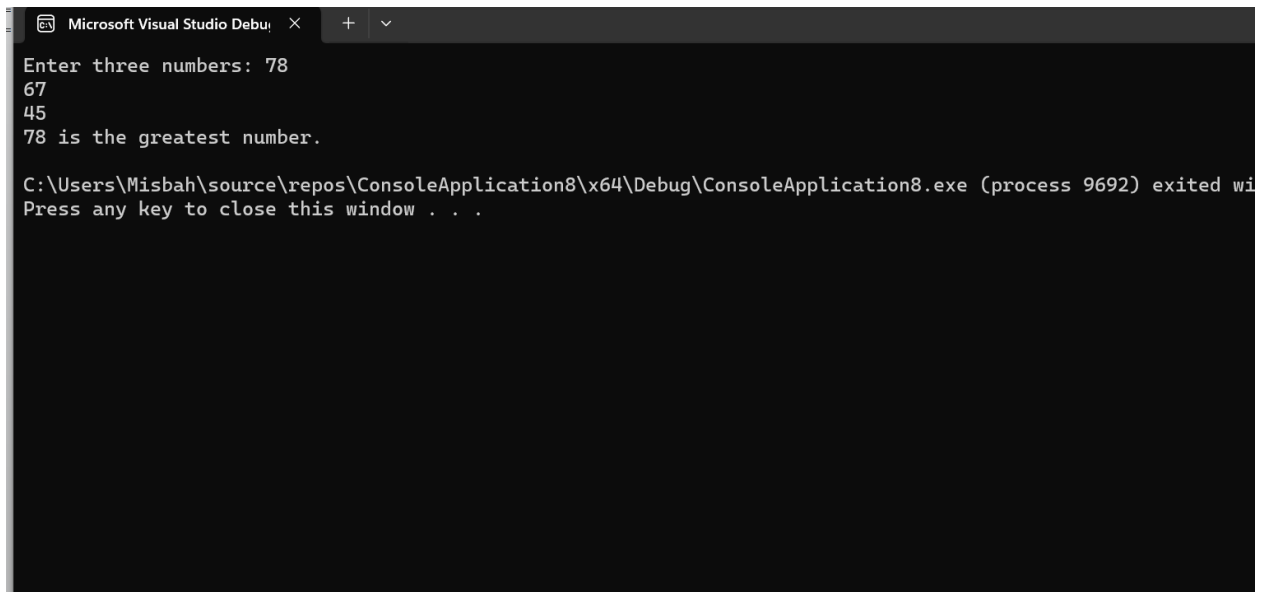
    cout << "Enter three numbers: ";
    cin >> num1 >> num2 >> num3;

    if (num1 >= num2) {
        if (num1 >= num3) {
            cout << num1 << " is the greatest number." << endl;
        }
        else {
            cout << num3 << " is the greatest number." << endl;
        }
    }
    else {
        if (num2 >= num3) {
            cout << num2 << " is the greatest number." << endl;
        }
        else {
            cout << num3 << " is the greatest number." << endl;
        }
    }

    return 0;
}
```



```
}
```



```
Microsoft Visual Studio Debug Console
Enter three numbers: 78
67
45
78 is the greatest number.

C:\Users\Misbah\source\repos\ConsoleApplication8\x64\Debug\ConsoleApplication8.exe (process 9692) exited with code 0.
Press any key to close this window . . .
```

Task # 06

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

int main() {
    char chr;

    cout << "Enter a character: ";
    cin >> chr;

    if ((chr >= 'a' && chr <= 'z') || (chr >= 'A' && chr <= 'Z')) {
        if (chr == 'a' || chr == 'e' || chr == 'i' || chr == 'o' || chr == 'u' || chr == 'A' || chr == 'E' || chr == 'I' || chr == 'O' || chr == 'U') {
            cout << chr << " is a vowel." << endl;
        }
        else {
            cout << chr << " is a consonant." << endl;
        }
    }
    else {
        cout << "Invalid input. Please enter an alphabet." << endl;
    }

    return 0;
}
```



```
Microsoft Visual Studio Debug Console
Enter a character: r
r is a consonant.

C:\Users\Misbah\source\repos\ConsoleApplication8\x64\Debug\ConsoleApplication8.exe (process 7204) exited
Press any key to close this window . . .
```

