

## C++ Program to find the length of string object

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

int main() {
    string str = "C++ Programming";

    // you can also use str.length()
    cout << "String Length = " << str.size();

    return 0;
}
```

## C++ Program to Find the Number of Vowels, Consonants, Digits and White Spaces in a String

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

int main()
{
    char line[150];
    int vowels, consonants, digits, spaces;

    vowels = consonants = digits = spaces = 0;

    cout << "Enter a line of string: ";
    cin.getline(line, 150);
    for(int i = 0; line[i]!='\0'; ++i)
    {
        if((line[i]=='a' || line[i]=='e' || line[i]=='i' ||
            line[i]=='o' || line[i]=='u' || line[i]=='A' ||
            line[i]=='E' || line[i]=='I' || line[i]=='O' ||
            line[i]=='U'))
        {
            ++vowels;
        }
        else if((line[i]>='a'&& line[i]<='z') || (line[i]>='A'&& line[i]<='Z'))
        {
            ++consonants;
        }
        else if(line[i]>='0' && line[i]<='9')
        {
            ++digits;
        }
        else
        {
            ++spaces;
        }
    }
}
```

```

        ++digits;
    }
    else if (line[i]==' ')
    {
        ++spaces;
    }
}

cout << "Vowels: " << vowels << endl;
cout << "Consonants: " << consonants << endl;
cout << "Digits: " << digits << endl;
cout << "White spaces: " << spaces << endl;

return 0;
}

```

### **C++ program to enter month number and print number of days in month.**

```

#include<iostream>
using namespace std;

int main()
{
    int month;
    cout << "Enter month number (1-12):";
    cin >> month;

    if(month == 1)
    {
        cout << "Enter month : January " << endl;
        cout << "No. of days : 31 days" << endl;
    }
    else if(month == 2)
    {
        cout << "Enter month : February " << endl;
        cout << "No. of days : 28 or 29 days" << endl;
    }
    else if(month == 3)
    {
        cout << "Enter month : March " << endl;
        cout << "No. of days : 31 days" << endl;
    }
    else if(month == 4)
    {

```

```
cout << "Enter month : April " <<endl;
cout << "No. of days : 30 days" <<endl;
}
else if(month == 5)
{
cout << "Enter month : May " <<endl;
cout << "No. of days : 31 days" <<endl;
}
else if(month == 6)
{
cout << "Enter month : June " <<endl;
cout << "No. of days : 30 days" <<endl;
}
else if(month == 7)
{
cout << "Enter month : July " <<endl;
cout << "No. of days : 31 days" <<endl;
}
else if(month == 8)
{
cout << "Enter month : August " <<endl;
cout << "No. of days : 31 days" <<endl;
}
else if(month == 9)
{
cout << "Enter month : September " <<endl;
cout << "No. of days : 30 days" <<endl;
}
else if(month == 10)
{
cout << "Enter month : October " <<endl;
cout << "No. of days : 31 days" <<endl;
}
else if(month == 11)
{
cout << "Enter month : November " <<endl;
cout << "No. of days : 30 days" <<endl;
}
else if(month == 12)
{
cout << "Enter month : December " <<endl;
cout << "No. of days : 31 days" <<endl;
}
```

```

        else
        {
            cout << "Invalid input! Please enter month number between (1-12).";
        }

        return 0;
    }
}

```

### **Write C++ program to print alphabets from a to z**

```

#include <iostream>
using namespace std;

int main()
{
    int character=0;
    char ch='A';
    do
    {
        character=int(ch);
        cout<<ch<<" ";
        character++;
        ch=char(character);
    }
    while(ch<='Z');
}

```

### **Write C++ program to print all negative elements in an array**

```

#include <iostream>
#define MAX_SIZE 100 //Maximum size of the array
using namespace std;

int main()
{
    int arr[MAX_SIZE]; //Declares an array size
    int i, num;

    //Enter size of array
    cout<<"Enter size of the array: ";
    cin>>num;

    //Reading elements of array

```

```

        cout<<"Enter elements in array: ";
        for(i=0; i<num; i++)
        {
            cin>>arr[i];
        }

        cout<<"All negative elements in array are:";
        for(i=0; i<num; i++)
        {
            //Printing negative elements
            if(arr[i] < 0)
            {
                cout<<arr[i];
            }
        }

        return 0;
    }

```

### **Write C++ program to put even and odd elements of array in two separate array**

```

#include <iostream>
#define MAX_SIZE 100 //Maximum size of the array
using namespace std;

// Function declaration to print array
void printArray(int arr[], int len);

int main()
{
    int arr[MAX_SIZE];
    int even[MAX_SIZE];
    int odd[MAX_SIZE];

    int evenCount, oddCount;
    int i, size;

    // Reading size of the array
    cout<<"Enter size of the array: ";
    cin>>size;

    // Reading elements in array
    cout<<"Enter elements in the array: ";

```

```

for (i = 0; i < size; i++) {
    cin>>arr[i];
}

evenCount = 0;
oddCount = 0;

for (i = 0; i < size; i++) {
    // If arr[i] is odd
    if (arr[i] & 1) {
        odd[oddCount] = arr[i];
        oddCount++;
    } else {
        even[evenCount] = arr[i];
        evenCount++;
    }
}

cout<<"\nElements of even array: ";
printArray(even, evenCount);

cout<<"\nElements of odd array: ";
printArray(odd, oddCount);

return 0;
}
//Logic
void printArray(int arr[], int len) {
    int i;

    for (i = 0; i < len; i++) {
        cout<<arr[i]<<"\t";
    }
    cout<<"\n";
}
}

```