
Computer Programming Lab

CEN-392

Program 7

Code :-

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

int Length(char str[])
{
    int len = 0;
    while (str[len] != '\0')
        len++;
    return len;
}

int Vowels(char str[])
{
    int len = Length(str);
    int vowels = 0;
    for (int i = 0; i < len; i++)
```

```

    {
        if (str[i] == 'a' || str[i] == 'A' || str[i] == 'e'
|| str[i] == 'E' ||
            str[i] == 'i' || str[i] == 'I' || str[i] == 'o'
|| str[i] == 'O' ||
            str[i] == 'u' || str[i] == 'U')
            vowels++;
    }
    return vowels;
}

```

```

void Remove_Extra_Space(char paragraph[])
{
    int length = Length(paragraph);
    for (int i = 1; i < length; i++)
    {
        if (paragraph[i] == ' ' && paragraph[i] ==
paragraph[i - 1])
        {
            for (int j = i; j < length; j++)
            {
                paragraph[j - 1] = paragraph[j];
            }
            length--;
            i--;
            paragraph[length] = '\0';
        }
    }
}

```

```

int Count_Spaces(char paragraph[])
{
    int length = Length(paragraph);
    int spaces = 0;
    for (int i = 0; i < length; i++)
    {
        if (paragraph[i] == ' ')
            spaces++;
    }
}

```

```
    }  
    return spaces;  
}  
  
int Count_Tabs(char paragraph[])  
{  
    int length = Length(paragraph);  
    int tabs = 0;  
    for (int i = 0; i < length; i++)  
    {  
        if (paragraph[i] == 9)  
            tabs++;  
    }  
    return tabs;  
}  
  
int Count_Sentences(char paragraph[])  
{  
    int length = Length(paragraph);  
    int sentence = 0;  
    for (int i = 0; i < length; i++)  
    {  
        if (paragraph[i] == '.')  
            sentence++;  
    }  
    return sentence;  
}  
  
int Count_Lines(char paragraph[])  
{  
    int length = Length(paragraph);  
    int lines = 1;  
    for (int i = 0; i < length; i++)  
    {  
        if (paragraph[i] == '\\n')  
            lines++;  
    }  
    return lines;  
}
```

```

}

void Bars()
{
    cout << "-----" << endl;
}
int main()
{
    system("cls");
    cout << "____Vicky_Gupta_20BCS070____" << endl;
    << endl;
    char paragraph[300];
    cout << "Enter A Paragraph : " << endl;
    cin.getline(paragraph, 300, '$');

    cout << endl;
    int vowels = Vowels(paragraph);
    int length = Length(paragraph);
    int spaces = Count_Spaces(paragraph);
    int tabs = Count_Tabs(paragraph);
    int lines = Count_Lines(paragraph);
    int sentence = Count_Sentences(paragraph);

    Bars();
    cout << "No Of Spaces : " << spaces << endl;
    cout << "No Of Tabs : " << tabs << endl;
    cout << "No Of Sentence : " << sentence << endl;
    cout << "No Of Lines : " << lines << endl;
    cout << "No Of Vowels : " << vowels << endl;
    << endl;
    Bars();
    cout << "Extra Spaces Removed : " << endl;

    Remove_Extra_Space(paragraph);
    cout << paragraph << endl;
    Bars();
    return 0;
}

```

Output :-

```
_____Vicky_Gupta_20BCS070_____
```

```
Enter A Paragraph :
```

```
My Name Is Vicky Gupta. And My Branch Is      Computer      Engineering.  
I Like To Play      Football.$
```

```
-----  
No Of Spaces : 21
```

```
No Of Tabs : 1
```

```
No Of Sentence : 3
```

```
No Of Lines : 2
```

```
No Of Vowels : 25
```

```
-----  
Extra Spaces Removed :
```

```
My Name Is Vicky Gupta. And My Branch Is Computer      Engineering.  
I Like To Play Football.
```