

C Programming Language Tutorial

By

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Agenda

- Reverse of a given string using pointers without use any new string in C Language.
- Most repeated character in given string using Pointers in C Language
- Question & answer

String Reverse

Write a program reverse of a given string using Pointers.

```
//Reverse of a string using Pointers
```

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
#include <string.h>
```

```
void reverseString(char*);
```

```
int main()
```

```
{
```

```
    char str[100];
```

```
    puts("Enter a string\n");
```

```
    gets(str);
```

```
    reverseString(str);
```

```
    puts("Reverse of the string is:");
```

```
    puts(str);
```

```
    return 0;
```

```
}
```

```
void reverseString(char *s)
{
    int length, c;
    char *begin, *end, temp;
    length = strlen(s);
    begin = s;
    end = s;
    for (c = 0; c < length - 1; c++)
        end++;
    for (c = 0; c < length / 2; c++)
    {
        temp = *end;
        *end = *begin;
        *begin = temp;
        begin++;
        end--;
    }
}
```

Most Repeated Character

Write a program to find the largest repeated or most repeated character in a string using Pointers.

```
#include <stdio.h>
#include <stdlib.h>
```

```
#define NUMOFCHARACTERS 256
char getMostRepeatedChar(char*);
int main()
{
    char str[100];
    puts( "Enter a string\n");
    gets(str);
    char mostRepeatCh = getMostRepeatedChar(str);
    printf("Most Repeated char in given string is: %c", mostRepeatCh);
    return 0;
}
```

```
char getMostRepeatedChar(char* str)
{
    int count[NUMOFCHARACTERS] = { 0 };

    int len = 0, i;
    for(i = 0; str[i] != '\0'; i++)
    {
        len++;
    }
    int max = 0;
    char result;
```

```
for (i = 0; i < len; i++)
    {
        unsigned char ch = str[i];
        count[ch]++;
        if (max < count[ch])
            {
                max = count[ch];
                result = ch;
            }
    }

return result;
}
```

Query ?

Thank You