ENG236 Computer Programming

Quiz 11 (19 November 2009)

Instructions: open book, 20 minutes, 100 marks

Please find below a function `myStrlen()` that performs the same function as `strlen()`.

```cpp
#include <iostream>
using namespace std;
int myStrlen(char *);

int main()
{   char String1[80];
    cout << "Please enter a word: ";
    cin >> String1;

    cout << "The length of ";
    cout << String1 << " is ";
    cout << myStrlen(String1);
    cout << "." <<endl;

    return 0;
}

int myStrlen(char * string)
{
    int i = 0;
    char *pString = string;

    while (*pString != '\0')
    {
        i++;
        pString += 1;
    }
    return i;
}
```

Consider a new function `myStrCnt(char aChar, char * string)` on the right hand side that returns the number of times that the character aChar occurs in string. Your task is to implement the `myStrCnt()` function.

```cpp
#include <iostream>
using namespace std;
int myStrCnt(char, char *);

int main()
{
    char aChar, String1[80];

    cout << "Please enter a word: ";
    cin >> String1;

    cout << "Please enter a
character to search for: ";
    cin >> aChar;

    cout << "The number of
occurrence of ";
    cout << "'" << aChar << "'" << "
in " << String1 << " is ";
    cout << myStrCnt(aChar,String1)
<< "." <<endl;

    return 0;
}


int myStrCnt(char aChar, char *
string)
{
    int i = 0;
    char *pString = string;

    while (*pString != '\0')
    {
        if (*pString == aChar)
            i++;
        pString += 1;
    }

    return i;
}
```