

EUROPEAN UNIVERSITY OF LEFKE  
Faculty of Engineering  
Department of Computer Engineering



COMP218  
OBJECT-ORIENTED  
PROGRAMMING

**Lab Work No. 5**

Prepared by Seward Richard Mupereri (20140175)

Submitted to Dr. Ferhun Yorgancıoğlu

## Task (1)

```
/*  
*****
```

Online C++ Compiler.

Code, Compile, Run and Debug C++ program online.

Write your code in this editor and press "Run" button to compile and execute it.

```
*****  
*****/
```

```
#include <iostream>  
#include <string>  
#include <iomanip>
```

```
using namespace std;
```

```
void printString(string s)  
{  
    cout << setw(55) << "STRING: " << s << endl;  
  
    cout << endl;  
    cout << setw(55) << "IS IT EMPTY?: " << (s.empty() ? "Yes" : "No") <<  
endl;  
    cout << setw(55) << "LENGTH?: " << s.length() << endl;  
    cout << setw(55) << "CAPACITY?: " << s.capacity() << endl;  
  
}
```

```
int main()  
{  
    int num;  
    string s0 = "DEFAULT STRING";  
    string s4 = "SOURCE";  
  
    cout << "STRING HANDLING PROGRAM" << endl;  
    cout << "1. CREATE" << endl;  
    cout << "2. INSERT" << endl;  
    cout << "3. APPEND" << endl;  
    cout << "4. ERASE" << endl;  
    cout << "5. REVERSE" << endl;  
    cout << "6. PRINT" << endl;  
    cout << "0. QUIT" << endl;  
  
    cout << "ENTER A NUMBER FROM THE MENU: " << endl;  
    while ( (cin >> num) && (num != 0) )  
    {  
        if ( (num >= 0) && (num < 7) )  
        {
```

```

switch( num )
{
    case 0:
    {
        cout << "QUITTING..." << endl;
        break;
    }
    case 1:
    {
        cout << endl << "|-----
-----|" << endl;
        cout << setw(80) << "WE CREATE A STRING ASSIGN IT
'SOURCE' " << endl << endl;
        string s1 = "SOURCE";
        printString(s1);
        break;
    }
    case 2:
    {
        cout << endl << "|-----
-----|" << endl;
        cout << setw(100) << "WE CAN INSERT A STRING 'CODE'
TO STRING 'SOURCE' " << endl << endl;
        char temp[] = " CODE";
        s4.insert( s4.length(), temp);
        printString(s4);
        break;
    }
    case 3:
    {
        cout << endl << "|-----
-----|" << endl;
        cout << setw(100) << "WE ADD 3 CHARACTERS FROM
'Google' TO 'Meta' FROM THE 4th INDEX" << endl << endl;
        string a = "Google", b = "Meta";
        a.append( b, 4, 3);
        printString(a);
        break;
    }
    case 4:
    {
        cout << endl << "|-----
-----|" << endl;
        cout << setw(80) << "WE DELETE THE DEAFULT STRING"
<< endl << endl;
        printString(s0);
        s0.clear();
        cout << endl;

```

```

        printString(s0);
        break;
    }
    case 5:
    {
        cout << endl << "|-----"
-----| " << endl;
        cout << setw(85) << "WE PRINT THE REVERSE OF A
STRING" << endl << endl;
        printString(s4);
        for (string::reverse_iterator i = s4.rbegin(); i <
s4.rend(); i++)
        {
            cout << *i;
        }
        printString(s4);
        break;
    }
    case 6:
    {
        cout << endl << "|-----"
-----| " << endl;
        cout << setw(85) << "WE PRINT A STRING" << endl <<
endl;

        string s3 = "NEW STRING";
        printString(s3);
        break;
    }
    }
    cout << endl << "|-----"
-----| "
<< endl;
    cout << "ENTER A NUMBER FROM THE MENU: " << endl;
}

return 0;
}

```

```

STRING HANDLING PROGRAM
1. CREATE
2. INSERT
3. APPEND
4. ERASE
5. REVERSE
6. PRINT
0. QUIT
ENTER A NUMBER FROM THE MENU:
1
|-----|
WE CREATE A STRING ASSIGN IT 'SOURCE'

STRING: SOURCE

IS IT EMPTY?: No
LENGTH?: 6
CAPACITY?: 15
|-----|
ENTER A NUMBER FROM THE MENU:
5
|-----|
WE PRINT THE REVERSE OF A STRING

STRING: SOURCE

IS IT EMPTY?: No
LENGTH?: 6
CAPACITY?: 15
ECRUOS
STRING: SOURCE

IS IT EMPTY?: No
LENGTH?: 6
CAPACITY?: 15
|-----|
ENTER A NUMBER FROM THE MENU:
0

...Program finished with exit code 0
Press ENTER to exit console.

```