

## GTU CSE 241 / 501 Quiz

**Std Code: 312**

**Std Number:**

2	1	0	1	0	4	0	0	4	0	3	9			
---	---	---	---	---	---	---	---	---	---	---	---	--	--	--

```
class MyStr {  
public:  
    MyStr();  
    MyStr(char *s);  
    MyStr(const MyStr& rhs);  
    int length() const;  
    ~MyStr();  
    MyStr& operator=(const MyStr& s);  
    MyStr& operator+=(const MyStr& s);  
private:  
    char* str;  
    int capacity;  
};
```

-----since i did not have enough space on other page, i used this space in quiz-----

-----But now i use the 3rd page in order to use default format-----

```

MyStr::MyStr(): capacity(20) {           //20 default size
    str = new char[capacity];
}

MyStr::MyStr(char *s) {
    int len = -1;
    while (s[++len] != '\0');
    capacity = len;
    str = new char[capacity];
    for (int i = 0; i < len; ++i)
        str[i] = s[i];
    str[len] = '\0';
}

MyStr::MyStr(const MyStr& rhs){
    capacity = rhs.capacity;
    str = new char[capacity];
    int i = 0;
    int len = rhs.length();
    for (i = 0; i < len; ++i)
        str[i] = rhs.str[i];
    str[i] = '\0';
}

int MyStr::length() {
    int i = -1;
    while (str[++i] != '\0');
    return (i);
}

MyStr& MyStr::operator=(const MyStr& rhs){
    if (&rhs == this) return *this;
    delete[] str;
    str = new char[rhs.length];
    strcpy(str, rhs.str);
    return *this;
}

```

```
MyStr& MyStr::operator+=(const MyStr& rhs){  
    MyStr temp;  
    temp.capacity = str.length() + rhs.length();  
    strcpy(temp.str, str);  
    strcat(temp.str, rhs.str);  
    return temp;  
}
```

```
MyStr::~MyStr(){  
    delete[] str;  
    str = nullptr;  
}
```