
Subject: differences in returns between pointer and reference

Posted by [BetoValle](#) on Sun, 02 May 2021 15:18:34 GMT

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Hi,

as a novice in c ++, put down some interesting returns of variable values between "pointer" and "reference" alternating.

if possible, I ask that the experts express about the only one that does not return value is the struct abc!

```
struct abc{
    String b;
public:
    abc( String& xx){
        b=xx;
    }
    void fecha(){
        b="retornado"; // this not return: reference constructor is address
    }
    ~abc(){};
};
```

```
struct de{
    String* b;
public:
    de( String* xx){
        b=xx;
    }
    void fecha(){
        *b="retornado"; // this return: reference constructor is pointer
    }
    ~de(){};
};
```

```
void rutina1( String &s )
{
    s="123";
}
void rutina2( String *s )
{
    *s="yyy";
}
```

```

CONSOLE_APP_MAIN
{
    String st="abc";

    rutina1(st);

    Cout() << "after rutina1: " << st << EOL;

    String* a = &st;

    rutina2(a);

    Cout() << "after rutina2: "<< *a << EOL;

    abc c(*a);
    c.fecha();
    c.~abc();

    Cout() << "after struct abc: "<< *a << EOL;

    de d(a);
    d.fecha();
    d.~de();

    Cout() << "after struct de: "<< *a << EOL;
}

```

Subject: Re: differences in returns between pointer and reference

Posted by [Oblivion](#) on Sun, 02 May 2021 16:01:55 GMT

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Hello BetoValle,

In the first instance you are copying the string to another string, not working on a reference.

```

struct abc{
    String b;
public:
    abc( String& xx){
        b=xx; // <-- the xx variable will be copied to b;
    }
}

```

```

    void fecha(){
        b="retornado"; // this not return: reference constructor is address (No, because you are not
working on a reference. You are working on a local variable called "b", which will be destroyed
with the struct, by the way.)
    }
    ~abc(){}; // << - Will destroy b.
};

```

This will work:

```

struct abc{
    String& b; // <-- Now b is a reference.
public:
    abc( String& xx)
        : b(xx) // > B will refer to xx;
    {
    }
    void fecha(){
        b="retornado"; // Will now set the referred object (xx).
    }
    ~abc(){}; // << - Will not destroy what b refers to (xx).
};

```

[/code]

Best regards,
Oblivion

Subject: Re: differences in returns between pointer and reference
 Posted by [BetoValle](#) on Mon, 03 May 2021 02:42:54 GMT
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Oblivion, Thanks!

the example of return with the struct "de", does it satisfy because it is simpler? do you see any problem about it?

Is the example you set from struct "abc" better than struct "de"?
