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## Question

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# Business Rule that can compare two fields in a repeating segment

I am trying to find the best way to evaluate if OBX-3 = **^IS TEST PATIENT?** and OBX-5 = **Y** In the same OBX in a Business Rule

```
OBX|1|NM|P-CSN|1|7623201922192|||||F
OBX|2|NM|P-UCI|2|||||F
OBX|3|TX|^ADT: PATIENT CLASS|1|Outpatient||||||20210715
OBX|4|TX|^IS TEST PATIENT?|1|Y
```

I started to create a function in a class that uses the Rule [] bracket syntax and extends Ens.Rule.FunctionSet:

But after some initial troubleshooting I realized that the [] brackets will not return a value if a field is null, making the two lists different lengths and impossible to compare.

```
HL7.[OBX:3] = <P-CSN><P-UCI><^ADT: PATIENT CLASS><^IS TEST PATIENT?>
```

```
HL7.[OBX:5] = <7623201922192><Outpatient><Y>
```

HL7.[OBX:5] list has 3 values instead of 4 because the 2nd OBX-5 is null.

Has anyone come up with a way to do this easily in a rule or do I have to try to pass the entire HL7 message into a function to compare a repeating segment like this?

Here is the function I started

```
PairedValuesInLists(HL7.[OBX:3],HL7.[OBX:5],"IS TEST PATIENT?","Y")
```

```
ClassMethod PairedValuesInLists(list1 As %String = "", list2 As %String = "",
value1 As %String, value2 As %String) As %Boolean [ Final ]
{
$$$LOGINFO(list1_"^"_list2_"^"_value1_"^"_value2)
set list1 = ##class(Ens.Util.FunctionSet).ReplaceStr(list1, "><", ",")
set list2 = ##class(Ens.Util.FunctionSet).ReplaceStr(list2, "><", ",") set
list1 = ##class(Ens.Util.FunctionSet).Strip(list1, "*", "<>")
set list2 = ##class(Ens.Util.FunctionSet).Strip(list2, "*", "<>")
et returnValue = 0
for i=1:1:$length(list1,",")
{
set list1Value = $piece(list1,",",i)
set list2Value = $piece(list2,",",i)

w list1Value, !
w list2Value, !
if ((value1 = list1Value) && (value2 = list2Value))
```

```
{  
  set returnValue = 1  
}  
  
}  
quit returnValue  
}
```

[#Business Rules](#) [#InterSystems IRIS](#)

Product version: IRIS 2019.1

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Source URL: <https://community.intersystems.com/post/business-rule-can-compare-two-fields-repeating-segment>