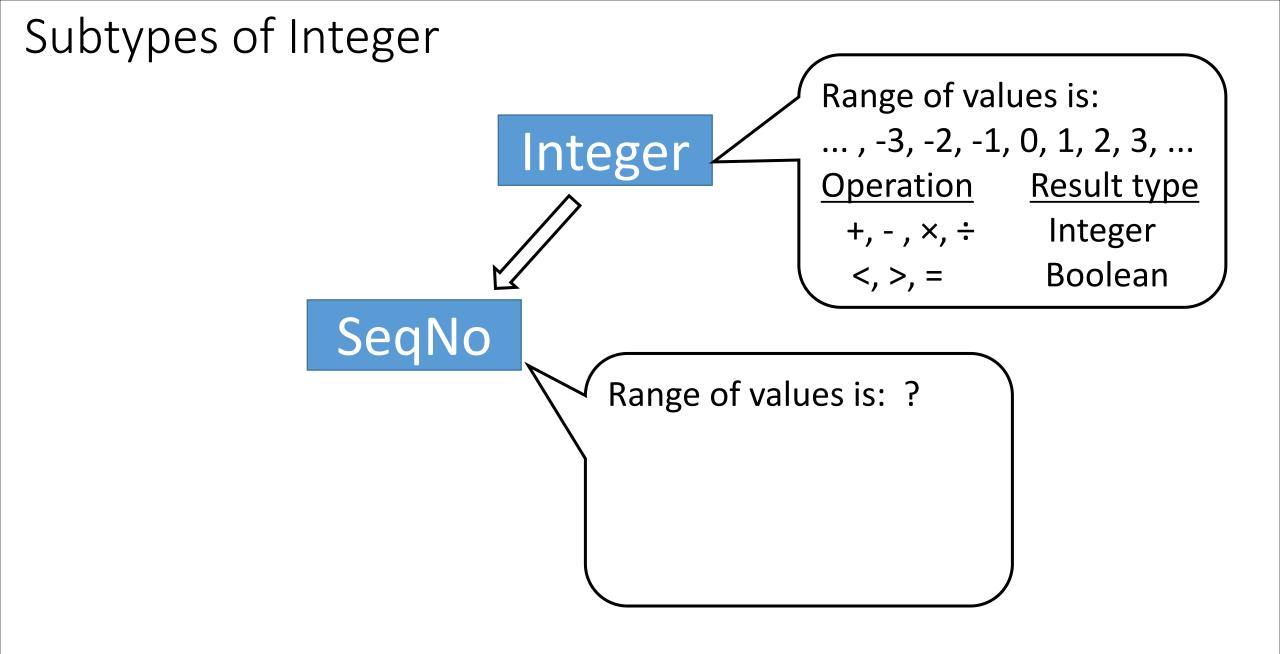
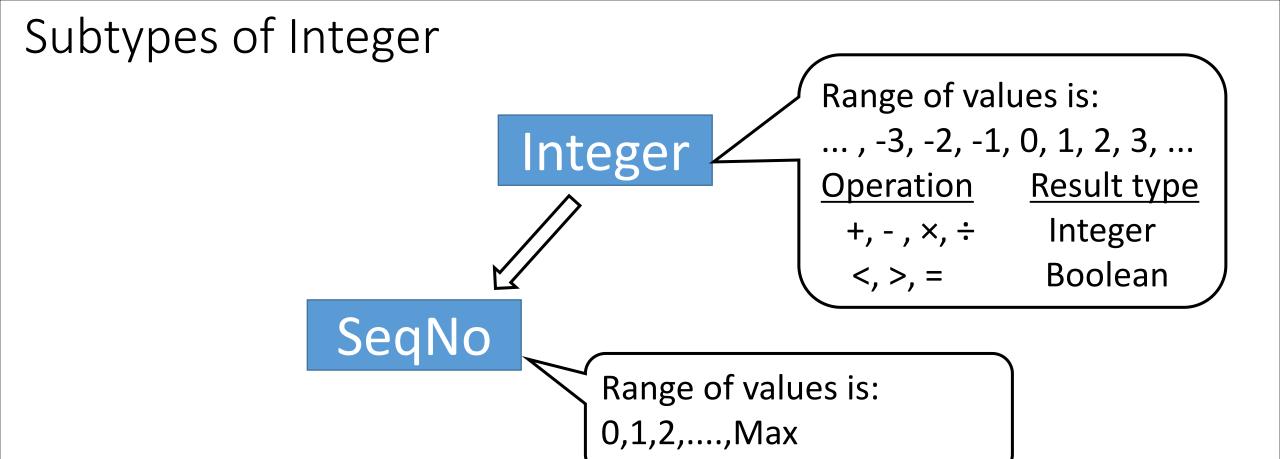


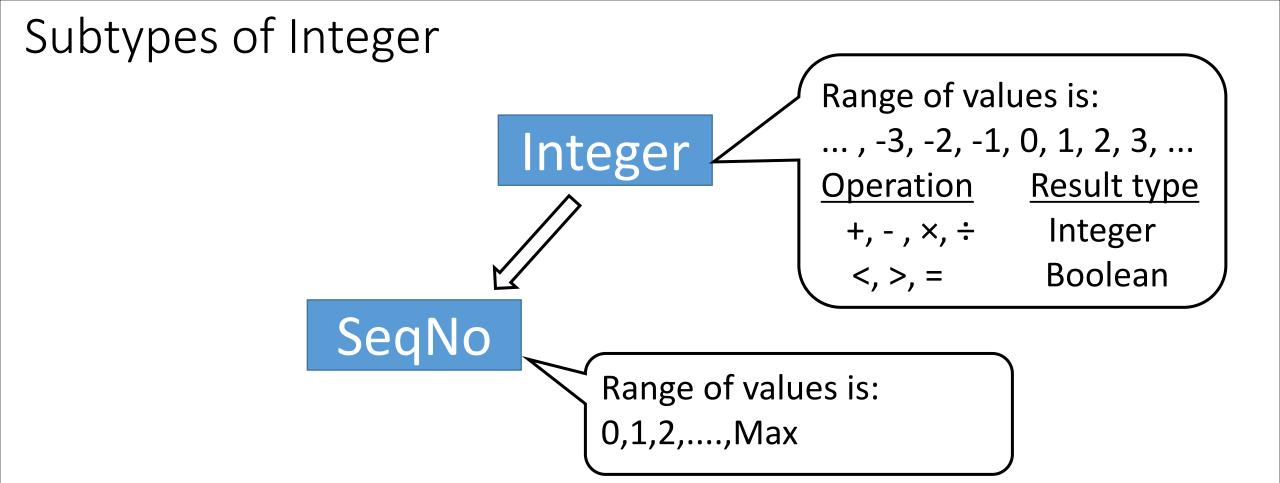
# IIT Madras ONLINE DEGREE

# Subtypes



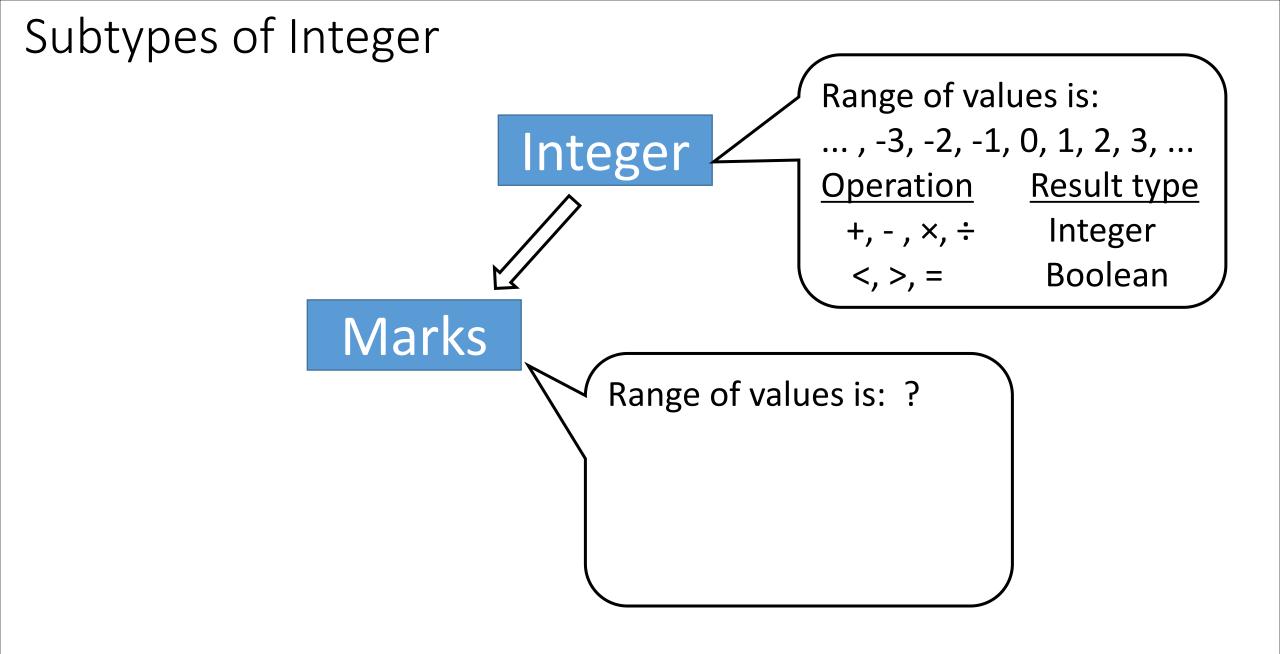


Max can be some reasonable number, e.g. 10000, which is the largest data set size that we can handle



Max can be some reasonable number, e.g. 10000, which is the largest data set size that we can handle

None of the integer operations make sense for the SeqNo data type



Subtypes of Integer Range of values is: ..., -3, -2, -1, 0, 1, 2, 3, ... Integer Operation Result type Integer +, - , ×, ÷ Boolean Marks Range of values is: 0, 1, 2, 3, ..., 100



Range of values is:

Operation F

Result type

Integer

Boolean

Marks

Range of values is:

0, 1, 2, 3, ..., 100

Operation Result type

**3**3

#### Subtypes of Integer Range of values is: ..., -3, -2, -1, 0, 1, 2, 3, ... Integer Result type Operation +, - , ×, ÷ Integer Boolean Marks

Range of values is: 0, 1, 2, 3, ..., 100 Operation Result type Marks

×, ÷ do not make sense for marks



Range of values is:

**Operation** 

Result type

Integer

Boolean

#### Marks

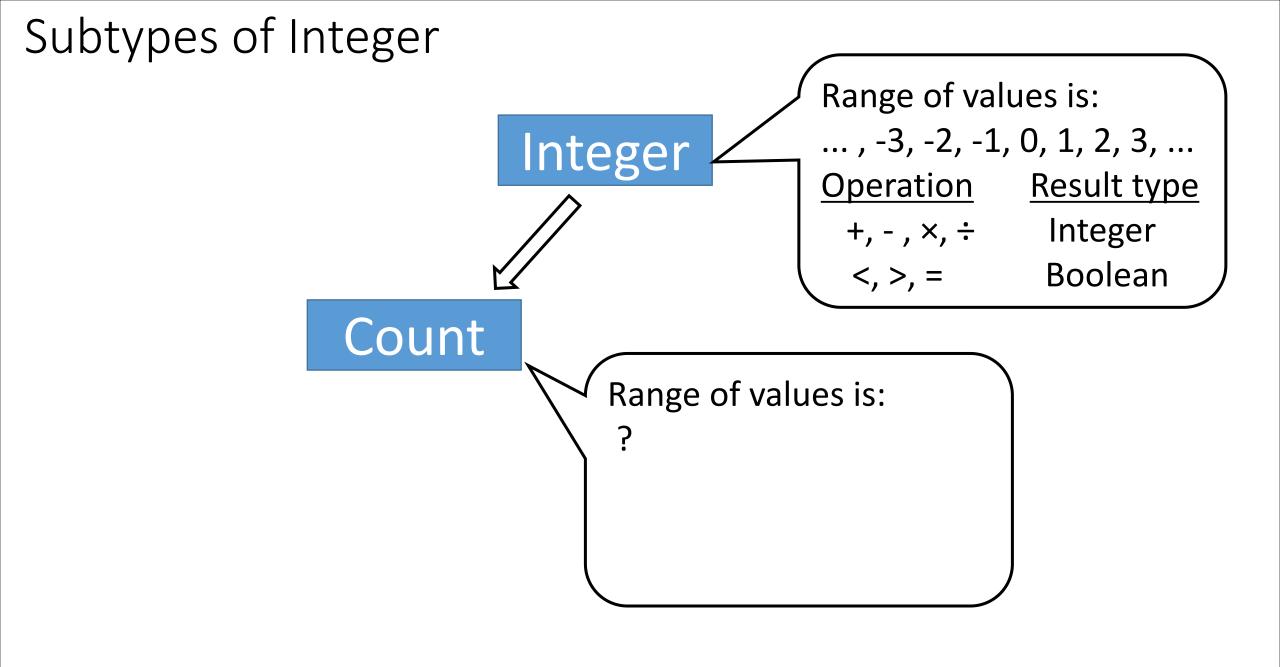
Range of values is:

0, 1, 2, 3, ..., 100

Operation Result type

Marks

Boolean





Range of values is:

Operation Result type

Integer

Boolean

Count

Range of values is:

0, 1, 2, 3, ...

Operation Result type

35

Integer

Range of values is:

<u>Operation</u>

Result type

Integer

Boolean

Count

Range of values is:

0, 1, 2, 3, ...

Operation Result type

+, -

Count

<, >, =

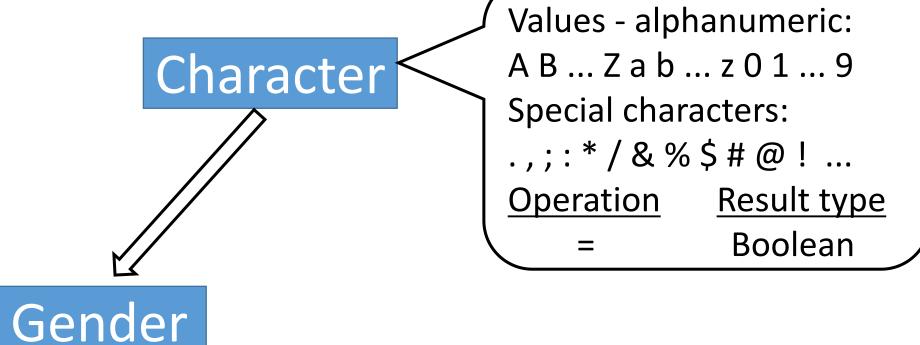
Boolean

×, ÷ do not make sense for counts

Character Data Type and its subtype Values - alphanumeric: AB...Zab...z01...9 Character Special characters: .,;:\*/&%\$#@!... Result type Operation Boolean Gender Values: ?

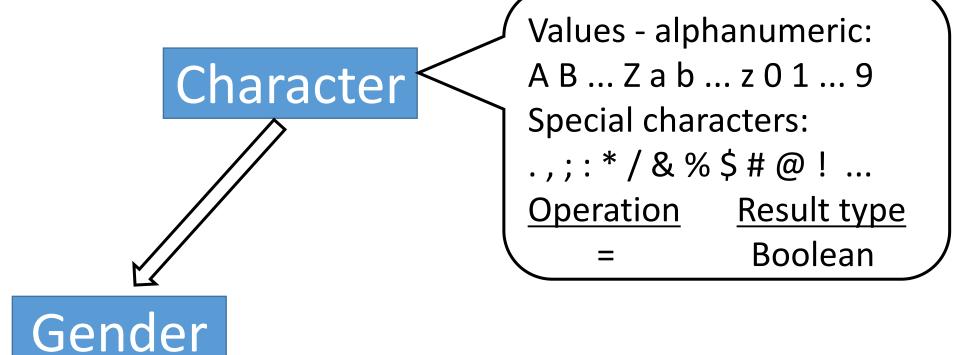
Character Data Type and its subtype Values - alphanumeric: AB...Zab...z01...9 Character Special characters: .,;:\*/&%\$#@!... Result type Operation Boolean Gender Values: M or F

Character Data Type and its subtype

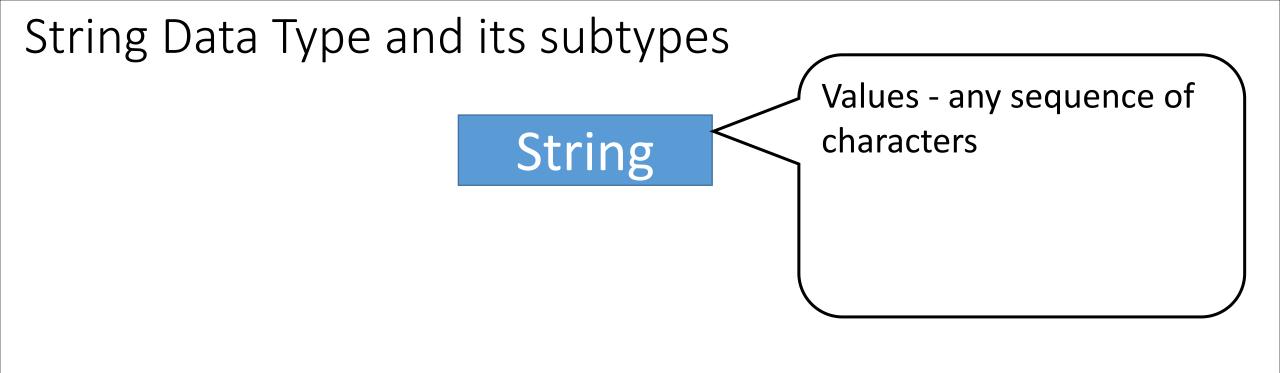


Values: M or F
Operation Result type
?

Character Data Type and its subtype



Values: M or F
Operation Result type
Boolean



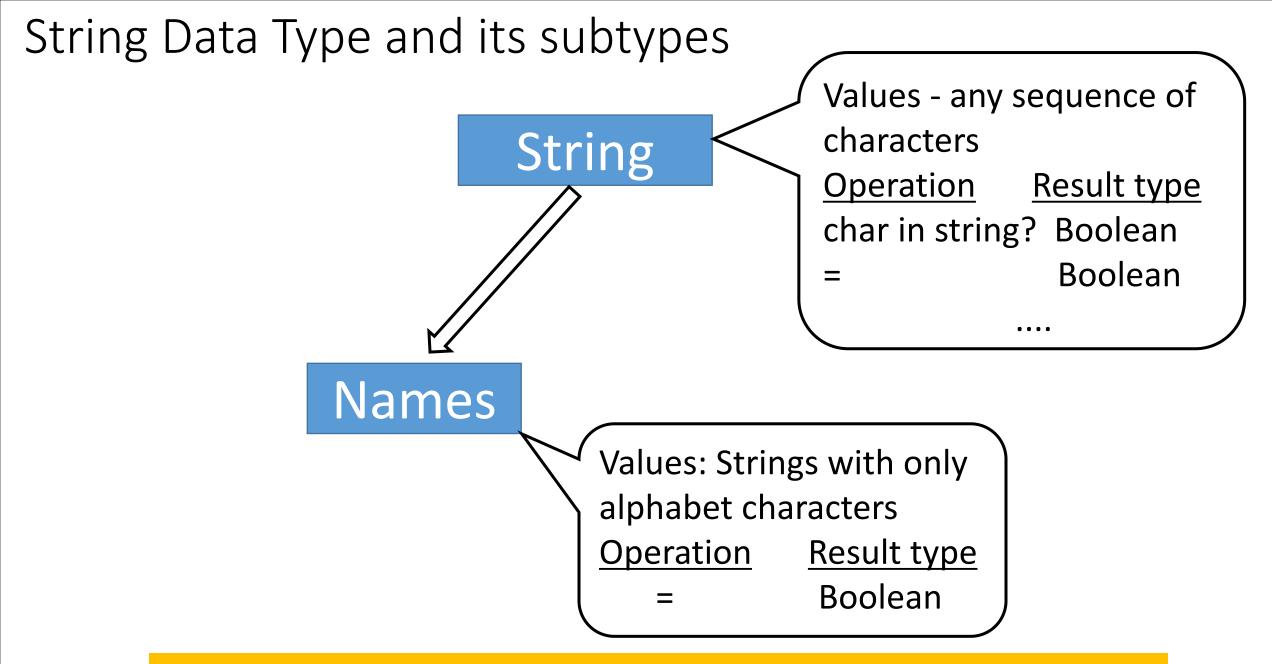
String Data Type and its subtypes

String

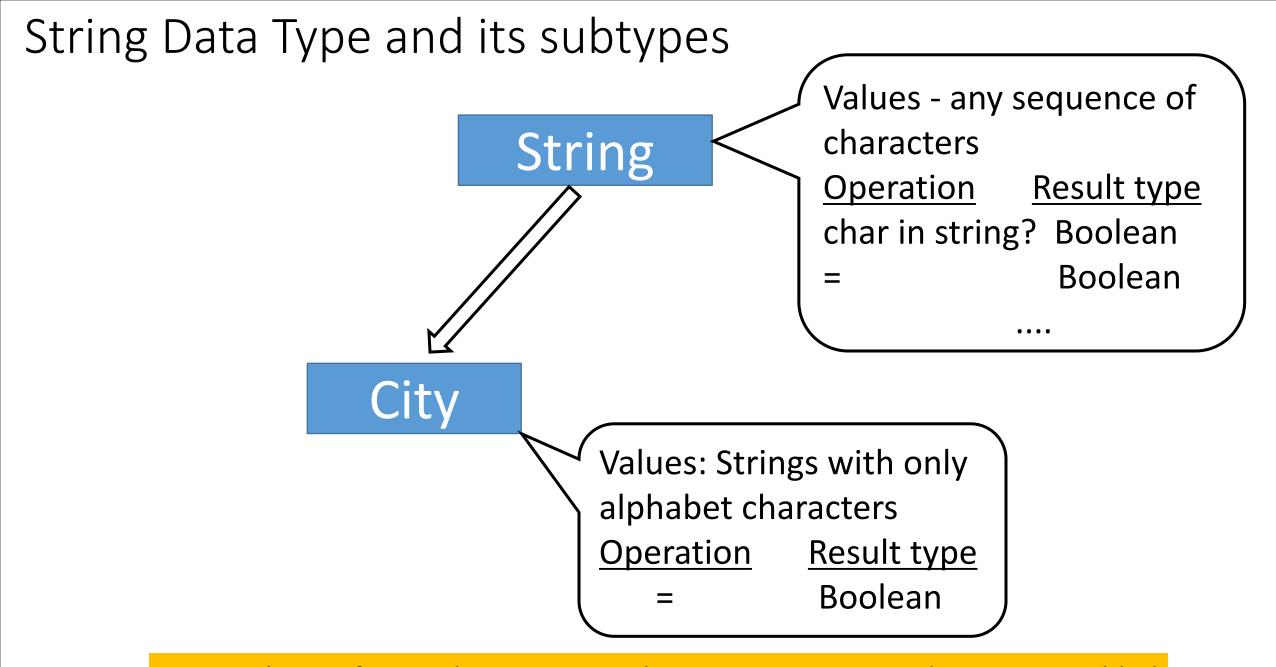
Values - any sequence of characters

Operation Result type char in string? Boolean

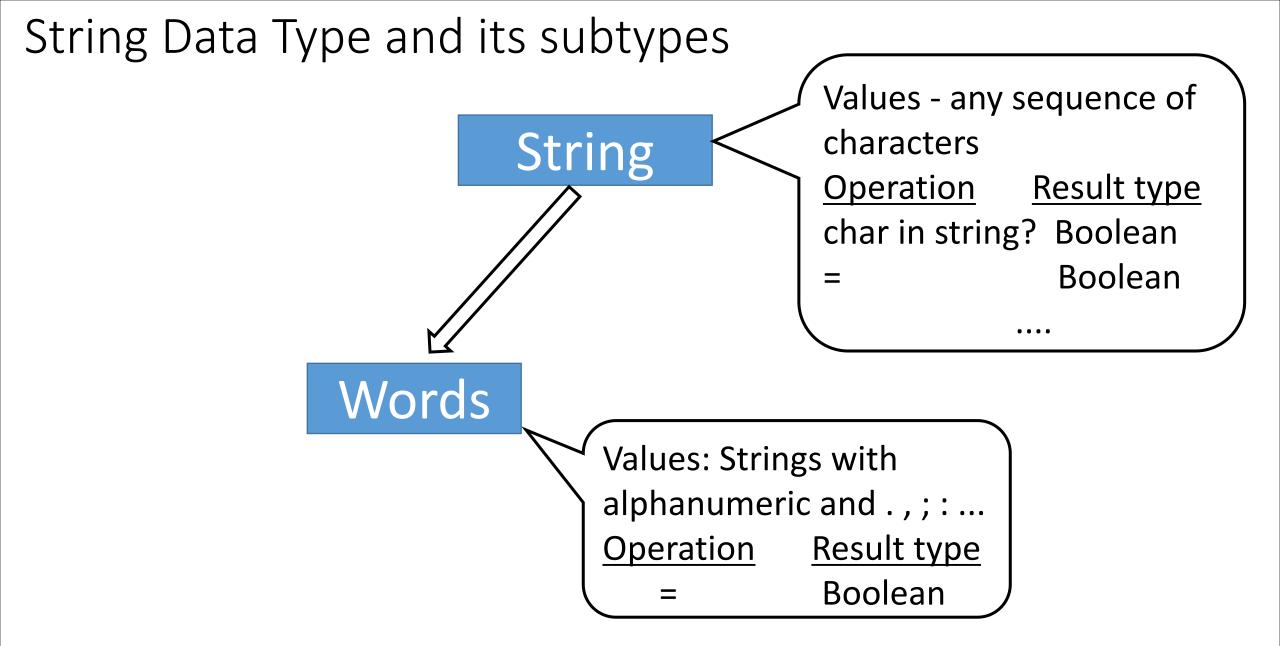
= Boolean



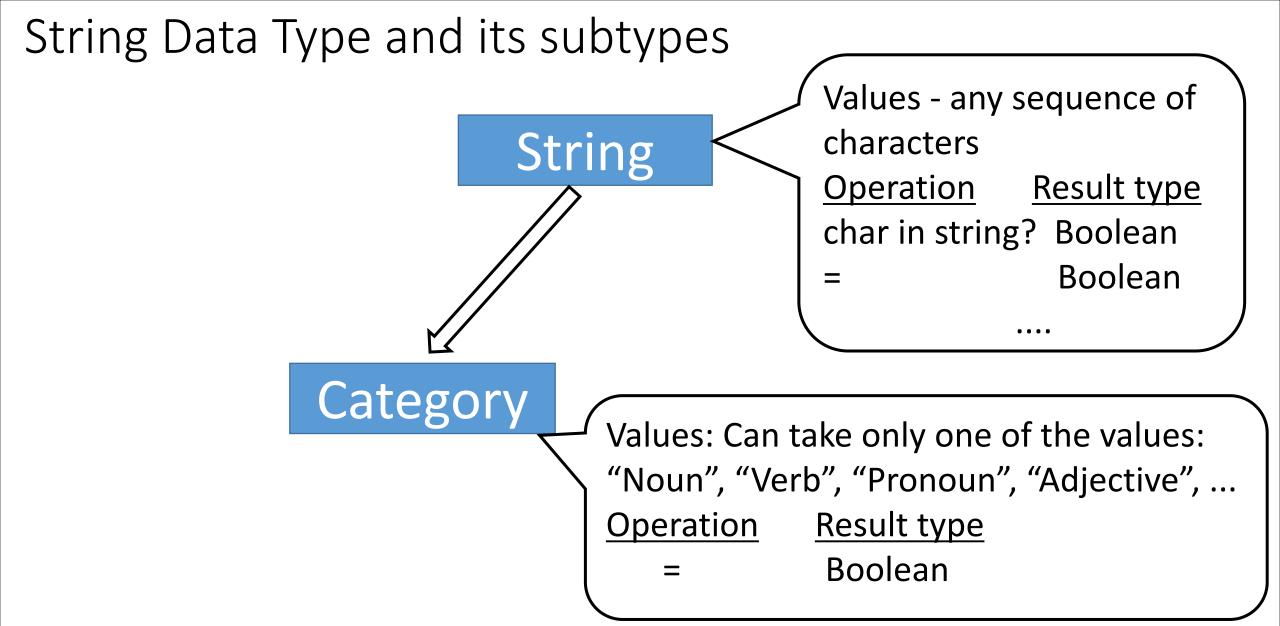
**Note -** Change from video: String made more restrictive and operation added



Note - Change from video: String made more restrictive and operation added



**Note -** Change from video: operation added



**Note -** Change from video: operation added