String Manipulation

In [1]:
```
#strings can be added (concatenatation)
word1 = "hello"
word2 = 'world'

fullword = word1 + word2
print(fullword)
```

```
helloworld
```

In [2]:
```
#strings can be repeated (repetition)
repeatword = word1 * 3

print(repeatword)
```

```
hellohellohello
```

In [3]:
```
#strings can be sliced
#each letter has an index position starting from 0
word2[:3]
```

Out[3]:
```
'wor'
```

In [4]:
```
#print statement formatting
name = 'Kenisha'

print("My name is {}".format(name))
```

```
My name is Kenisha
```

In [5]:
```
#works for numbers
age = 31

print("My name is {0} and I am {1} years old.".format(name, age))
```

```
My name is Kenisha and I am 31 years old.
```

In [6]:
```
#change the case of the letters
intro= "My name is Kenisha"

print(intro.lower()) #lowercase
print(intro.upper()) #uppercase
```

```
my name is kenisha
MY NAME IS KENISHA
```

In [7]:
```
#check if string has all alphabetical characters
#this returns false because it has a space (not a letter)
intro.isalpha()
```

Out[7]:
```
False
```

In [8]:
```
#can search for a string within a string
#returns starting index position of string
#returns -1 if string not found
intro.find("name")
```

Out[8]:
```
3
```

In [9]:
```
#find if a string starts with another string
#returns True or False
intro.startswith("name")
```

Out[9]:
```
False
```

In [10]:
```
#replace one string with another
intro.replace("Kenisha", "Bob")
```

Out[10]:
```
'My name is Bob'
```

In [11]:
```
#split a string into parts by a given character
#splits on whitespace by default

#returned item is a list
#each split word is an item in the list
intro.split()
```

Out[11]:
```
['My', 'name', 'is', 'Kenisha']
```

In [12]:
```
#split by letter
intro.split("e")
```

Out[12]:
```
['My nam', ' is K', 'nisha']
```

In [13]:
```
newstr = "2015-07-04"

#split function can also use other strings to split by
#split by dash
newstr.split("-")
```

Out[13]:
```
['2015', '07', '04']
```

In [14]:
```
extra = "   hello world    "

print(extra.rstrip()) #remove whitespace on right side
print(extra.lstrip()) #removes whitespace on left side
print(extra.strip())  #removes whitespace on both sides
```

```
   hello world
hello world
hello world
```

In [15]:
```
extra.lstrip()
```

Out[15]:
```
'hello world    '
```

In [16]:
```
extra.rstrip()
```

Out[16]:
```
'   hello world'
```

In [17]:
```
extra.strip()
```

Out[17]:
```
'hello world'
```

In [18]:
```
#newlines and tabs
fruits = "apples\n\toranges\nbananas"

print(fruits)
```

```
apples
        oranges
bananas
```

In [19]:
```
#take in information via a prompt
#will store information as a string
message = input("What is your name?")
print("Hello {}".format(message))
```

```
What is your name?Kenisha
Hello Kenisha
```

In [20]:
```
message = input("What is your name?")
print(f"Hello {message}")
```

```
What is your name?Kenisha
Hello Kenisha
```