1. Store text data into variable

In [1]:
```python
message = "Hello World"
print(message)
```

```
Hello World
```

We can use both single quote and double quote when creating string data. So, when we use it separately?
If the data have a single quote as a data, then we need to use double quote. We can use a escape character "\" instead.

2. Methods for the String data type

- len(str) : Return the length of input string.
- str[idx] : Return the element in index idx.
- str[:idx] : Return the sequence of elements in index zero to idx.
- str.lower() : Convert the uppercase characters into lowercase.
- str.upper() : Convert the lowercase characters into uppercase.
- str.count(key) : Count the number of key existing in string data.
- str.found(key) : Return the first index of key in string data.
- str.replace('a', 'b') : Replace first argument 'a' with 'b'.

In [4]:
```python
print(len(message))
print(message[3])
```

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```

3. String formatting

Above the version 3.6, Python release the new way of formatting called f-format.

In [6]:
```python
new_message = f'{message} is new!'
print(new_message)
```

```
Hello World is new!
```

4. helper method : dir, help

dir funtion returns method we can use based on input object.

In [7]:
```python
print(dir(new_message))
```

```
['__add__', '__class__', '__contains__', '__delattr__', '__dir__', '__doc__', '__eq__', '__format__', '__ge__', '__ge
tattribute__', '__getitem__', '__getnewargs__', '__gt__', '__hash__', '__init__', '__init_subclass__', '__iter__', '_
_le__', '__len__', '__lt__', '__mod__', '__mul__', '__ne__', '__new__', '__reduce__', '__reduce_ex__', '__repr__', '_
_rmod__', '__rmul__', '__setattr__', '__sizeof__', '__str__', '__subclasshook__', 'capitalize', 'casefold', 'center',
'count', 'encode', 'endswith', 'expandtabs', 'find', 'format', 'format_map', 'index', 'isalnum', 'isalpha', 'isasci
i', 'isdecimal', 'isdigit', 'isidentifier', 'islower', 'isnumeric', 'isprintable', 'isspace', 'istitle', 'isupper',
'join', 'ljust', 'lower', 'lstrip', 'maketrans', 'partition', 'replace', 'rfind', 'rindex', 'rjust', 'rpartition', 'r
split', 'rstrip', 'split', 'splitlines', 'startswith', 'strip', 'swapcase', 'title', 'translate', 'upper', 'zfill']
```

help function returns the documents of input object and functions.

In [9]:
```python
help(str.lower)
```

```
Help on method_descriptor:

lower(self, /)
    Return a copy of the string converted to lowercase.
```