# Day 5



## String Methods in Python:

**What are String Methods?**

String methods are built-in functions used to perform operations on strings like:

- changing case
- finding text
- replacing text
- removing spaces

String methods do not change the original string (strings are immutable).

Case-Related String Methods: upper(), lower(), title(), capitalize()

Example: basic example of upper() and lower()



Example: example of title() and capitalize()

Removing Spaces: strip(), lstrip(), rstrip()

```
 6    name = "!!Aditya!!"
 7    print(name)
 8    print(name.strip("!"))   #removes specified characters from both ends
 9    print(name.lstrip("!"))  #removes specified characters from the left end
10    print(name.rstrip("!"))  #removes specified characters from the right end
```

PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

PS E:\Python\Day1-10\Day5> python main.py
!!Aditya!!
Aditya
Aditya!!
!!Aditya
PS E:\Python\Day1-10\Day5>

Replacing Text: replace()

```
12    text = "I like Java"
13    print(text)
14    print(text.replace("Java", "Python"))
```

PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORT

PS E:\Python\Day1-10\Day5> python main.py
I like Java
I like Python

```
12    text = "I like Java, but Java is not so java"
13    print(text)
14    print(text.replace("Java", "Python"))
```

PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

PS E:\Python\Day1-10\Day5> python main.py
I like Java, but Java is not so java
I like Python, but Python is not so java
PS E:\Python\Day1-10\Day5>

Finding and Checking Text: find(), index(), count()

```
16    name = "Aditya"
17    print(name.find("d"))  #returns the index of the first occurrence of the specified substring
18    print(name.find("y"))  #returns the index of the first occurrence of the specified substring
19
```

PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

```
PS E:\Python\Day1-10\Day5> python main.py
1
4
```

```
16    name = "Aditya"
17    print(name.index("d"))  #returns the index of the first occurrence of the specified value
18    print(name.find("z"))   #returns the index of the first occurrence of the specified value
19    print(name.index("z"))  #returns the index of the first occurrence of the specified value
```

PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

```
PS E:\Python\Day1-10\Day5> python main.py
1
-1
Traceback (most recent call last):
  File "E:\Python\Day1-10\Day5\main.py", line 19, in <module>
    print(name.index("z"))  #returns the index of the first occurrence of the specified value
                     ^^^
ValueError: substring not found
```

```
21    a = "Aditya a"
22    print(a.count("a"))
23    print(a.count(a))
```

PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

```
PS E:\Python\Day1-10\Day5> python main.py
2
1
```

Splitting and Joining Strings: split(), join()

```
25    name = "Aditya"
26    print(name.split())
27    print(name.split("i"))
28    print(name.split("t"))
29    print(name.split("a"))
```

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

PS E:\Python\Day1-10\Day5> python main.py
['Aditya']
['Ad', 'tya']
['Adi', 'ya']
['Adity', '']
```

```
31    words = ["Python", "is", "easy"]
32    print(words)
33    print(" ".join(words))
```

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PO

PS E:\Python\Day1-10\Day5> python main.py
['Python', 'is', 'easy']
Python is easy
```
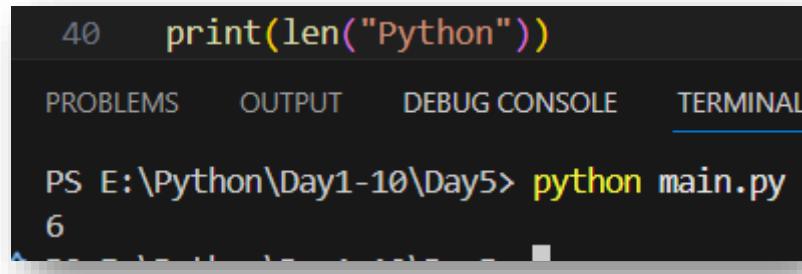
startswith() and endswith():

```
35    file = "program.py"
36
37    print(file.startswith("program"))
38    print(file.endswith(".py"))
```

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

PS E:\Python\Day1-10\Day5> python main.py
True
True
```
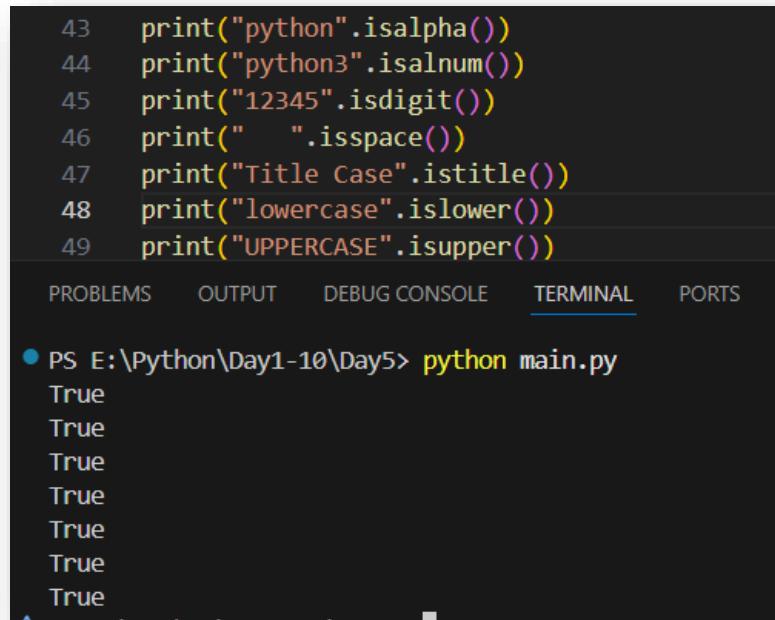
String length method: length()

```
40    print(len("Python"))

PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL

PS E:\Python\Day1-10\Day5> python main.py
6
```

Checking string type: isalpha(), isdigit(), isalnum(), islower(), isupper(

```
43    print("python".isalpha())
44    print("python3".isalnum())
45    print("12345".isdigit())
46    print("   ".isspace())
47    print("Title Case".istitle())
48    print("lowercase".islower())
49    print("UPPERCASE".isupper())

PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

PS E:\Python\Day1-10\Day5> python main.py
True
True
True
True
True
True
True
```

Summary, String methods are built-in functions for strings

- Strings are immutable (original string doesn't change)
- Common methods:
    - Case: upper(), lower(), title()
    - Spaces: strip(), lstrip(), rstrip()
    - Search: find(), count()
    - Replace: replace()
    - Check: isalpha(), isdigit()
    - Split & Join: split(), join()

--The End--