

Day 4



Strings in Python:

What is a String?

A string is a collection of characters (letters, numbers, symbols) written inside quotes. Strings are used to store text data.

How to Create a String?

You can use:

- Single quotes ''
- Double quotes " "
- Triple quotes """ "" or """ """

Example:

```
1 f_name = "Aditya"
2 l_name = "Kumar"
3 print(f_name)
4 print(l_name)
```

The screenshot shows a code editor interface with a dark theme. At the top, there are tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, and TERMINAL. The TERMINAL tab is currently selected. Below the tabs, the code for `main.py` is displayed. When the terminal is run, it outputs "Aditya" on the first line and "Kumar" on the second line.

Example: printing double quotes using the single quote.

```
5 apple = '"Aditya is a boy"'
6 print(apple)
```

The screenshot shows a code editor interface with a dark theme. At the top, there are tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, and TERMINAL. The TERMINAL tab is currently selected. Below the tabs, the code for `main.py` is displayed. When the terminal is run, it outputs a string containing double quotes: "Aditya is a boy".

Example: using triple quotes for strings in multiple line.

```
10     message = '''Aditya
11     Are you good?
12     Yes I am fine.'''
13     print(message)

PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

● PS E:\Python\Day1-10\Day4> python main.py
Aditya
Are you good?
● Yes I am fine.
```

Example: accessing characters in the string.

```
15     name = "Aditya"
16     print(name[0])
17     print(name[1])

PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL

● PS E:\Python\Day1-10\Day4> python main.py
A
d
```

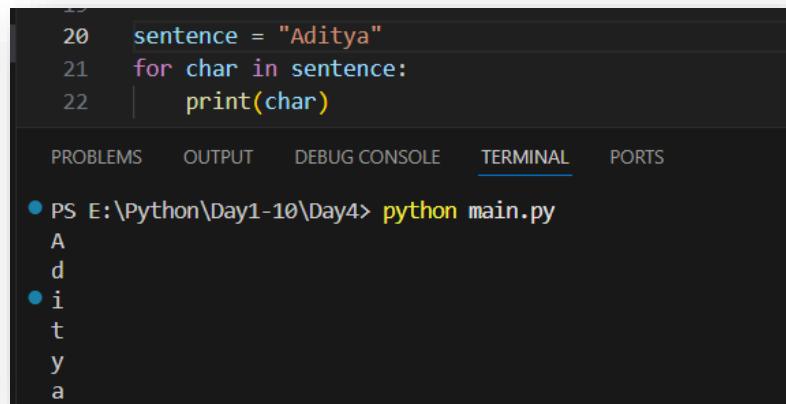
Example: printing the index which doesn't exists.

```
15     name = "Aditya"
16     print(name[0])
17     print(name[1])
18     print(name[6])

PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS

● PS E:\Python\Day1-10\Day4> python main.py
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d
● Traceback (most recent call last):
  File "E:\Python\Day1-10\Day4\main.py", line 18, in <module>
    print(name[6])
               ^^^^
IndexError: string index out of range
```

Example: printing the character of the string using the for...in loop.



```
20 sentence = "Aditya"
21 for char in sentence:
22     print(char)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

● PS E:\Python\Day1-10\Day4> python main.py

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String Slicing in Python:

What is String Slicing?

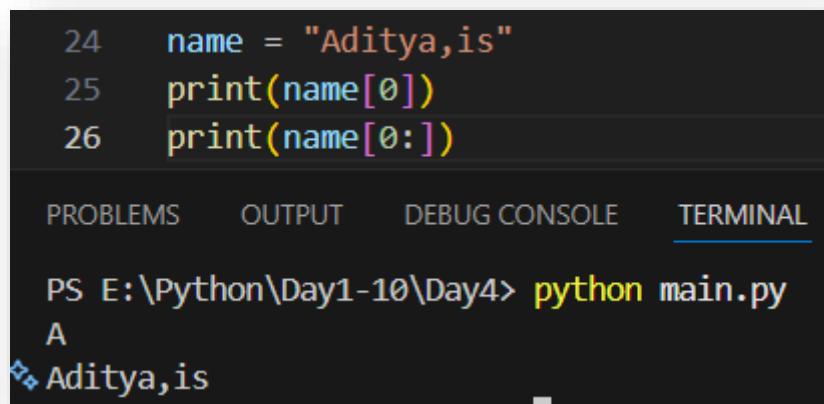
String slicing means getting a part of a string.

Syntax:

string[start : end]

- start → starting index (included)
- end → ending index (excluded)

Example: [0:]



```
24 name = "Aditya,is"
25 print(name[0])
26 print(name[0:])
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

PS E:\Python\Day1-10\Day4> python main.py

A
❖ Aditya,is

Example: [0:4]

```
24     name = "Aditya,is"
25     print(name[0])
26     print(name[0:4])
27
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL
● PS E:\Python\Day1-10\Day4> python main.py
A
Adit
```

Example: [:4]

```
23
24     name = "Aditya,is"
25     print(name[0:4])
26     print(name[:4])
27
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL
● PS E:\Python\Day1-10\Day4> python main.py
Adit
Adit
```

Example: [:-1]

```
28     name = "Aditya,is"
29     print(name[:-1])
30
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL
● PS E:\Python\Day1-10\Day4> python main.py
Aditya,i
```

--The End--