

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)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

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

Example: printing double quotes using the single quote.

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

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

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

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

Example: printing the index which doesn't exist.

```
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
A
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
A
d
i
t
y
a
```

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])
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

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

Example: [:4]

```
24 name = "Aditya,is"
25 print(name[0:4])
26 print(name[:4])
```

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])
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
● PS E:\Python\Day1-10\Day4> python main.py
Aditya,i
```

--The End--