◆ What is a String?

- A string is a sequence of characters enclosed within **single quotes (' ')**, **double quotes (" ")**, or even **triple quotes (''' ''' / """ """)**.

Example:

name = "Ankit Pandey" greeting = 'Hello World' multiline = """This is a multiline string""" print(name) print(greeting) print(multiline)

◆ String Indexing & Slicing

Strings are like arrays of characters. Each character has an index.

Example:

text = "Python"

print(text[0])

print(text[-1])

 print(text[0:4])

◆ Common String Methods

Here are the most useful string methods you should know:

1. upper() **&** lower():- Convert the entir string into lower or uppercase.

   msg = "hello Python"

```python
print(msg.upper())
print(msg.lower())
```

2. strip() :- removes extra spaces from the beginning and ending of a string.

```python
data = " Ankit "
print(data.strip())
```

3. replace():- Replaces a part of the string with another substring.

```python
text = "I like Java"
print(text.replace("Java", "Python"))
```

4. split():- Splits the string into a list, based on spaces or a separator.

```python
sentence = "Python is fun"
print(sentence.split())
```

5. join():- Joins the elements of a list into a single string with a separator.

```python
words = ['Python', 'is', 'cool']
print(" ".join(words)) # Python is cool
```

6. find():- Returns the index (position) of the first occurrence of a substring. If not found, returns -1.

```python
quote = "Data Science is powerful"
print(quote.find("Science")) # 5
```

7. count():- Counts how many times a character or substring appears in a string.

   msg = "banana"

   print(msg.count("a")) # 3

8. startswith() **&** endswith();- Check whether a string starts with particular value or not. It return Boolean value true/false.

   name = "Ankit Pandey"

   print(name.startswith("Ankit"))
   print(name.endswith("y"))