

# Tuples kya hote hain?

Tuples Python mein ek immutable (unchangeable) sequence type hote hain, jismein multiple elements store kiye ja sakte hain. Tuple ka size fixed hota hai, aur ek baar tuple banane ke baad usme koi changes nahi kiye ja sakte, jaise elements ko add ya remove nahi kar sakte.

- Tuples ko parentheses () ke andar define kiya jaata hai, jaise:

```
my_tuple = (1, 2, 3, 4)
```

## Tuple ke kuch key points:

1. Immutable hote hain, jo ek baar ban jaane ke baad change nahi kiye ja sakte.
2. Multiple data types ko ek saath store kar sakte hain.
3. Indexing aur slicing ki support milti hai, jaise lists mein hoti hai.
4. Tuples ko iterate kiya ja sakta hai.
5. Empty tuples bhi banaye ja sakte hain.

- Example

```
# Tuple with different data types
my_tuple = (1, "apple", 3.14)

# Index ke through first element ko access karna
print(my_tuple[0]) // Output: 1

# Tuple ko slice karna, yahan 1st index se end tak elements print ho rahe hain
print(my_tuple[1:]) // Output: ("apple", 3.14)
```

## Tuple ke methods jo sabse jada use hote h

- 1 .count(): Yeh method tuple mein kisi element ki occurrence (count) ko return karta hai.

```
my_tuple = (1, 2, 2, 3)
print(my_tuple.count(2)) // Output: 2
```

- 2 .index(): Yeh method tuple mein kisi element ka first occurrence ka index return karta hai.

```
my_tuple = (10, 20, 30, 40)
print(my_tuple.index(30)) // Output: 2
```

- 3 len(): Yeh method tuple ke elements ki total count ko return karta hai.

```
my_tuple = (1, 2, 3)
print(len(my_tuple)) // Output: 3
```

- 4 min(): Yeh method tuple ke elements mein se minimum value return karta hai (agar all elements comparable hain).

```
my_tuple = (5, 1, 8)
print(min(my_tuple)) // Output: 1
```

- 5 max(): Yeh method tuple ke elements mein se maximum value return karta hai (agar all elements comparable hain).

```
my_tuple = (5, 1, 8)
print(max(my_tuple)) // Output: 8
```