

DATE:06/06/2024

13. Write program that demonstrates the usage of these notations by analysing the time complexity of some example algorithms.

AIM: To demonstrates the usage of these notations by analysing the time complexity of some example algorithms.

CODE:

```
def example_algorithm_1(n):
```

```
    for i in range(n):
```

```
        print(i)
```

```
def example_algorithm_2(n):
```

```
    for i in range(n):
```

```
        for j in range(n):
```

```
            print(i, j)
```

```
def example_algorithm_3(n):
```

```
    i = 1
```

```
    while i < n:
```

```
        print(i)
```

```
        i *= 2
```

OUTPUT:

```
=== Code Execution Successful ===
```

TIME COMPLEXITY: $O(n)$