

105.computing a binomial coefficient.

Program:

```
def binomial_coefficient_iterative(n, k):
```

```
    if k < 0 or k > n:
```

```
        return 0
```

```
    result = 1
```

```
    for i in range(1, min(k, n - k) + 1):
```

```
        result = result * (n - i + 1) // i
```

```
    return result
```

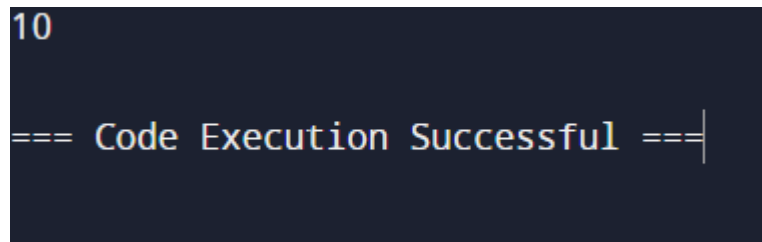
Example Usage

```
n = 5
```

```
k = 2
```

```
print(binomial_coefficient_iterative(n, k))
```

Output:



```
10
=== Code Execution Successful ===
```

Time complexity:

$O(n * \max(k, n - k))$