How to Fix TypeError: Int Object Is Not Iterable in Python

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The Python `TypeError: 'int' object is not iterable` is an exception that occurs when trying to loop through an integer value. In Python, looping through an object requires the object to be "iterable". Since integers are not iterable objects, looping over an integer raises the `TypeError: 'int' object is not iterable` exception.

Python TypeError: Int Object Is Not Iterable Example

Here's an example of a Python `TypeError: 'int' object is not iterable` thrown when trying iterate over an integer value:

```
myint = 10

for i in myint:
    print(i)
```

In the above example, `myint` is attempted to be iterated over. Since `myint` is an integer and not an iterable object, iterating over it raises a `TypeError: 'int' object is not iterable` :

```
File "test.py", line 3, in <module>
    for i in myint:
TypeError: 'int' object is not iterable
```

How to Fix TypeError: Int Object Is Not Iterable

In the above example, `myint` cannot be iterated over since it is an integer value. The Python `range()` function can be used here to get an iterable object that contains a sequence of numbers starting from 0 and stopping before the specified number.

Updating the above example to use the `range()` function in the `for` loop fixes the error:

```
myint = 10

for i in range(myint):
    print(i)
```

Running the above code produces the following output as expected:

```
0
1
2
3
```

```
4
5
6
7
8
9
```

How to Avoid TypeError: Int Object Is Not Iterable

The Python `TypeError: 'int' object is not iterable` error can be avoided by checking if a value is an integer or not before iterating over it.

Using the above approach, a check can be added to the earlier example:

```
myint = 10

if isinstance(myint, int):
    print("Cannot iterate over an integer")
else:
    for i in myint:
        print(i)
```

A try-except block can also be used to catch and handle the error if the type of object not known beforehand:

```
myint = 10

try:
    for i in myint:
        print(i)
except TypeError:
    print("Object must be an iterable")
```

Surrounding the code in try-except blocks like the above allows the program to continue execution after the exception is encountered:

```
Object must be an iterable
```


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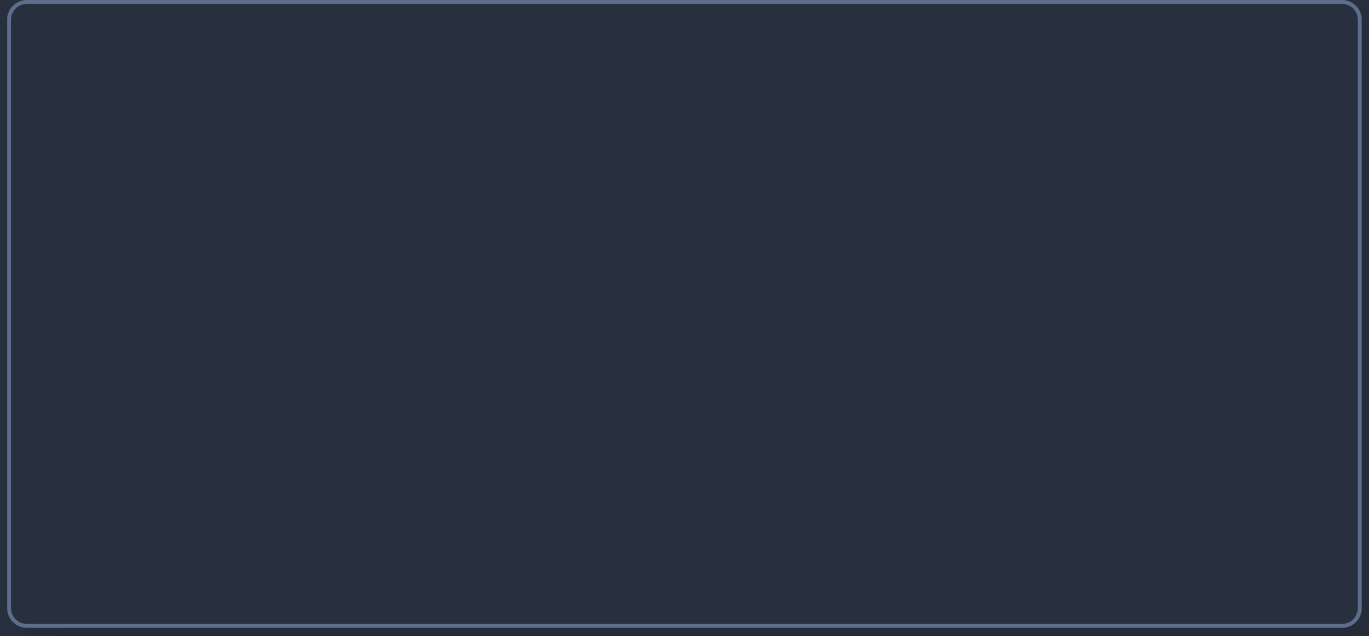

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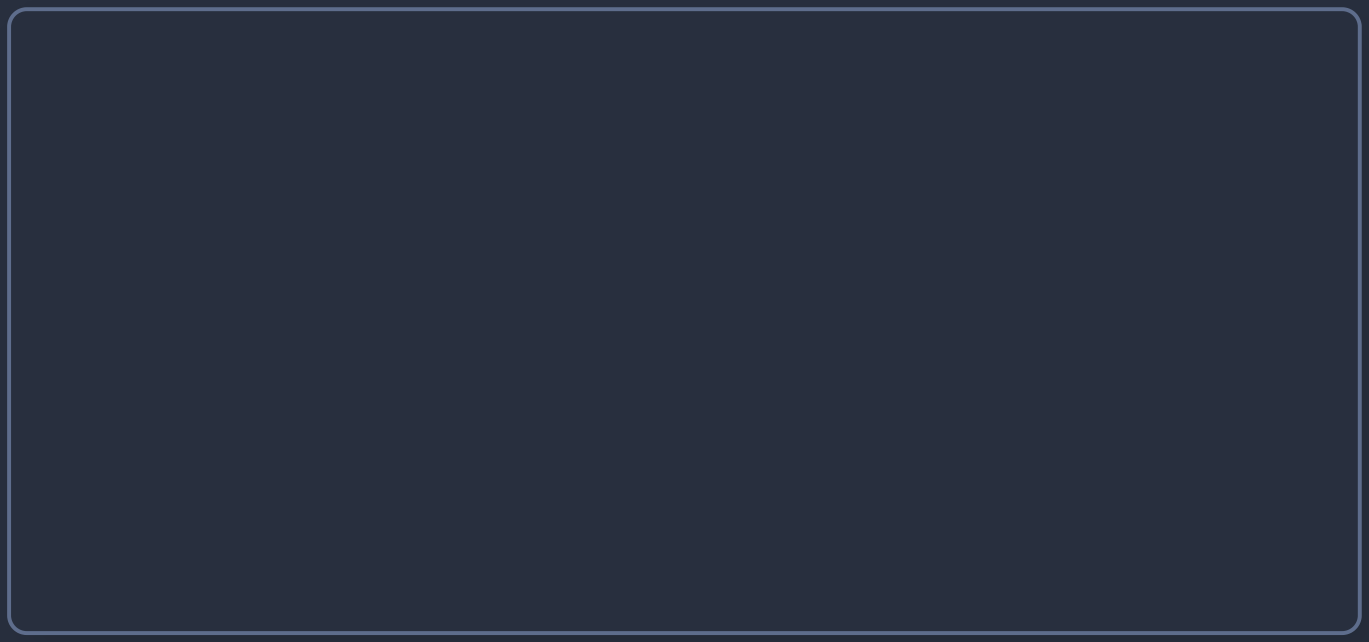

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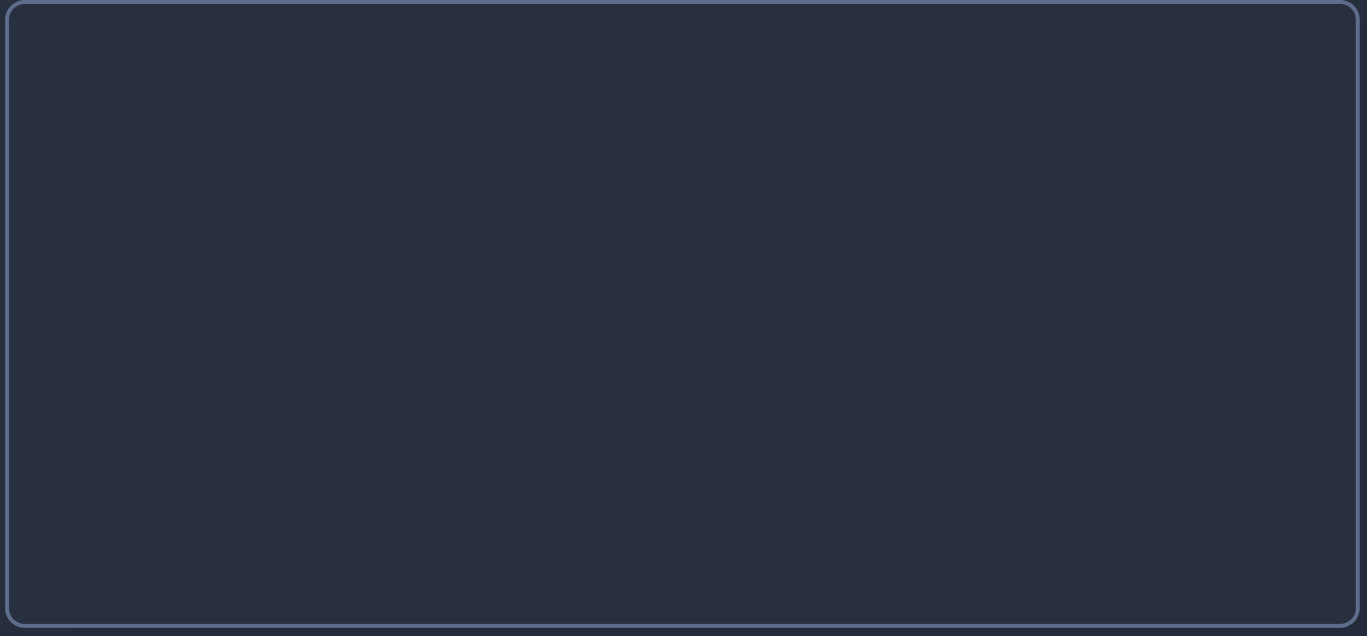

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