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CONTINUE Statements

Programming and Algorithms

Lecture by

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```
n = 3
for i in range(1,n+1):
    print("Hello World!")
```

```
Hello World!
Hello World!
Hello World!
```

What will we Cover?

- CONTINUE statements
- Use numeric and Boolean data types

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CONTINUE Statements

- Affects the flow but does not terminate a `for` or a `while` loop
- Terminates the current iteration in the loop, meaning that part or the whole body of the loop is skipped

Example

Henry is baking cakes, but he is only adding the icing to every other cake.

CONTINUE Statements in Python

Could be used with `while` and `for` loops

```
while <condition>:
 body(if <condition>:
  continue)
```

Extra indentation for the `continue` statement

`continue` statement is written as part of the body of an `if` statement

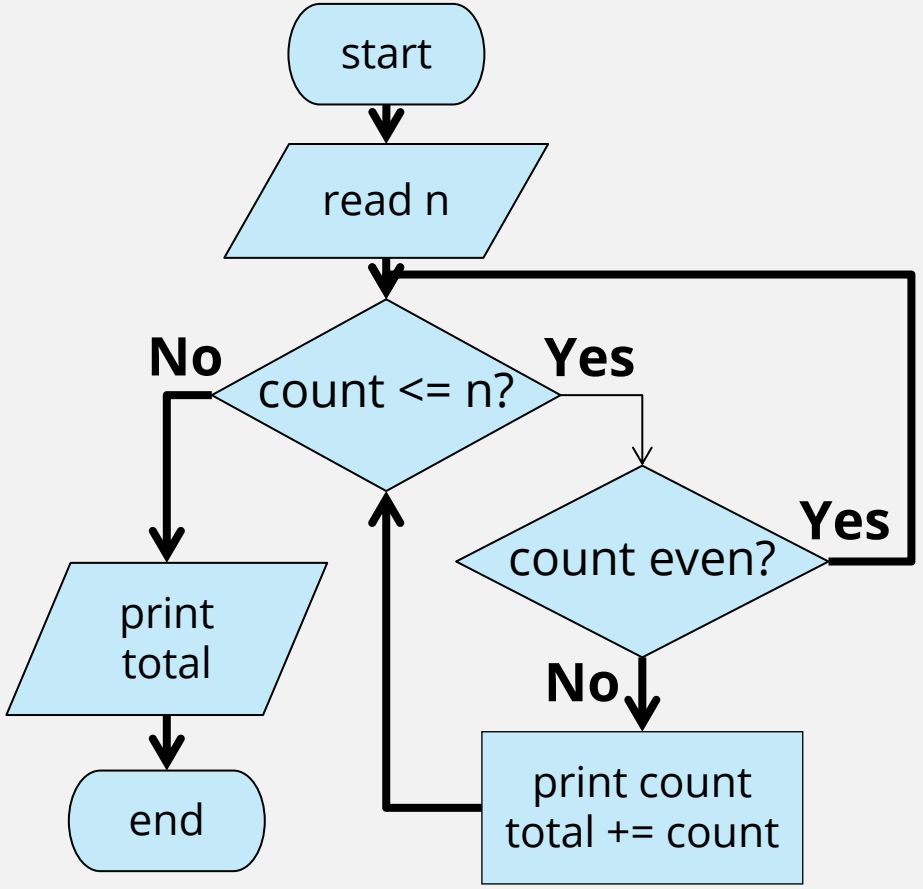
CONTINUE Statement Flow Chart


```
n = int(input("enter n: "))
total = 0

for count in range(1, n+1):
 if count%2 == 0:
  continue
 print(("the count is", count)
 total += count
print("the total is", total)
```

Condition for continue

CONTINUE Statement Flow Chart




```
n = int(input("enter n: "))
total = 0

for count in range(1, n+1):
 if count%2 == 0:
  continue
 print(("the count is", count)
 total += count
print("the total is", total)
```

Condition for continue

Examples

```
n = int(input("enter n: "))
total = 0

for count in range(1, n+1):
    if count%2 == 0:
        continue
    total += count
    print("the count is", count)
print("the total is", total)
```

```
enter n: 6
the count is 1
the count is 3
the count is 5
the total is 9
```

Condition for continue

Examples

```
n = int(input("enter n: "))

print("divisors of", n, "are:")
for count in range(1, n+1):
    if n%count != 0:
        continue
    print(count)
```

```
enter n: 12
divisors of 12 are:
1
2
3
4
6
12
```

Condition for continue

Try It Yourself

Write a program in Python environment that calculates the sum of every third number between **m** and **n**

Hint: m and **n** are given by the user input (using the `input()` function) at the start of the code

m and **n** are assumed to be of type `int` and `m < n`

For example, `m = 2` and `n = 14`