



PYTHON DAY - 4

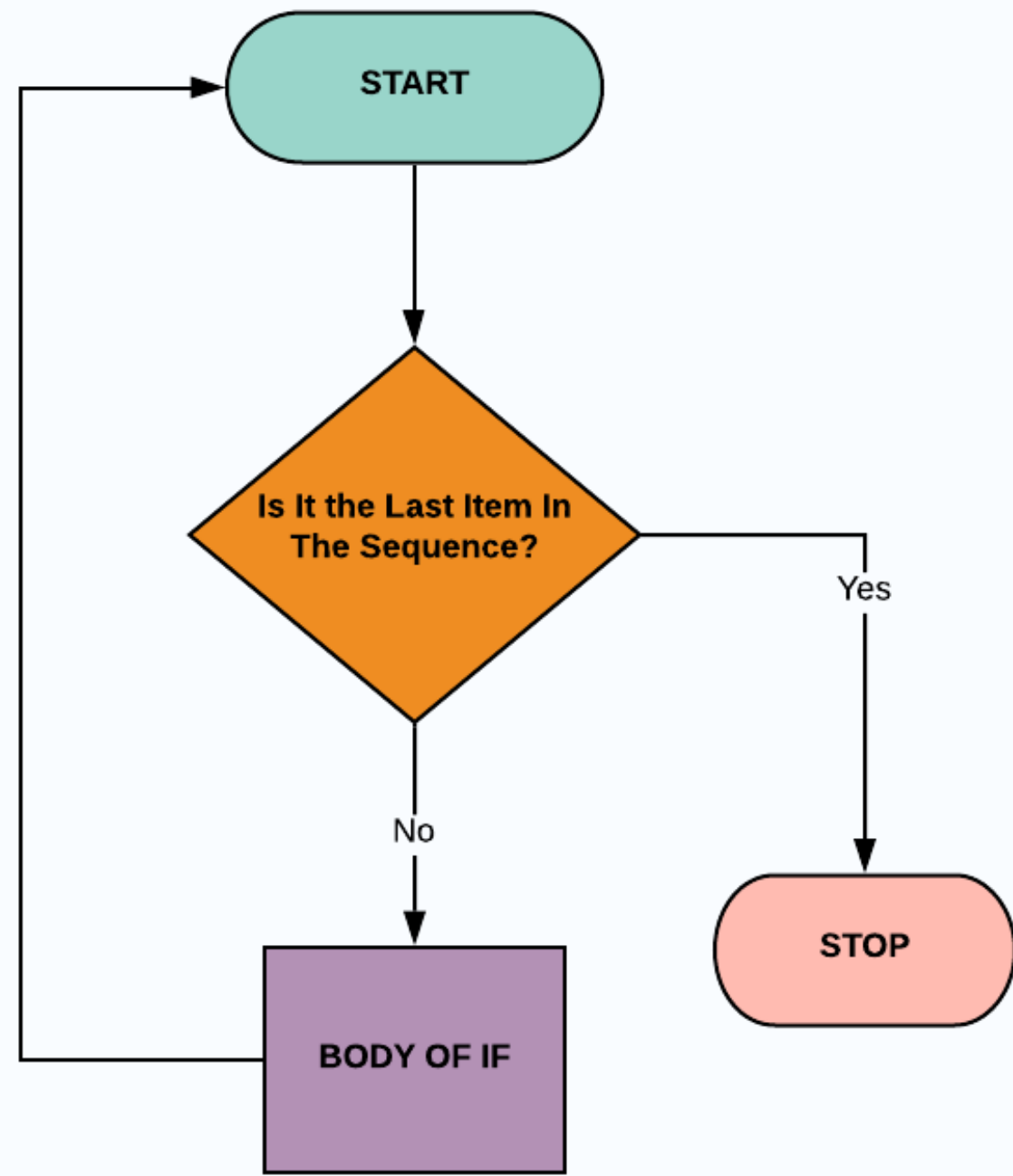




FOR LOOP



• for loop



- For loops in Python are used to iterate over a sequence (list, tuple, or string) and perform a specific action for each item in the sequence
- Even strings are iterable objects, they contain a sequence of characters

• for loop



```
fruits = ["apple", "orange", "banana"]  
for x in fruits:  
    print(x)
```



```
for x in "banana":  
    print(x)
```

• break statement



```
fruits = ["apple", "banana", "orange"]  
for x in fruits:  
    print(x)  
    if x == "banana":  
        break
```

• continue statement



```
fruits = ["apple", "banana", "orange"]
for x in fruits:
    if x == "banana":
        continue
    print(x)
```


• RANGE



```
for x in range(10):  
    print(x)
```

```
for x in range(5, 20):  
    print(x)
```

```
for x in range(2, 20, 3):  
    print(x)
```

• NESTED FOR LOOP



```
adj = ["red", "big", "tasty"]  
fruits = ["apple", "banana", "cherry"]  
  
for x in adj:  
    for y in fruits:  
        print(x, y)
```


• EXERCISE



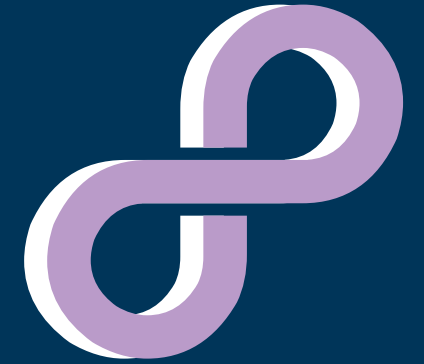
1. Python program to print the sum of all elements in an array
2. Recreate this using for loop in python:

1
12
123
1234
12345

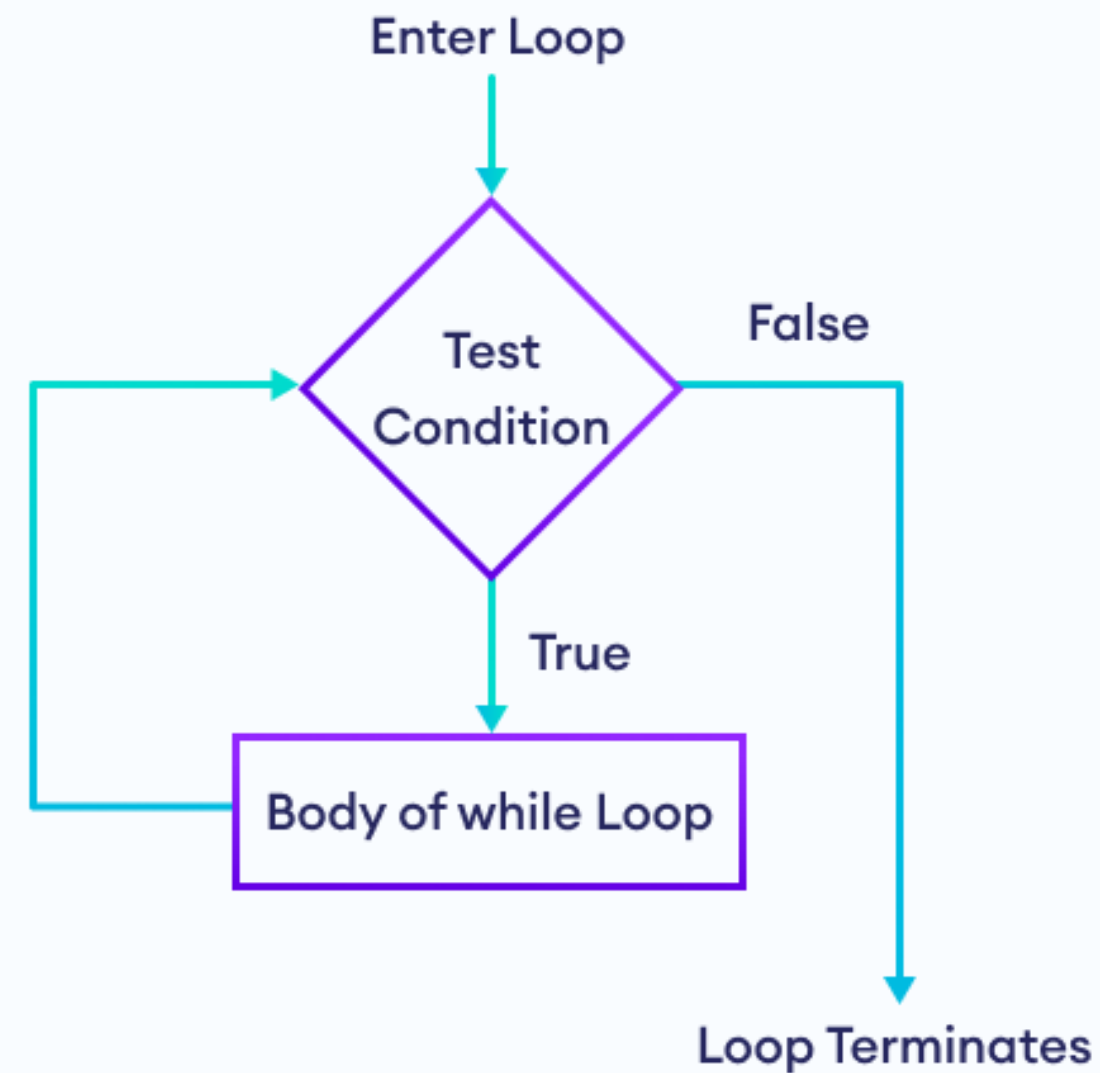
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WHILE LOOP



• while loop



With the while loop we can execute a set of statements as long as a condition is true

• while loop



```
x = 1
```

```
while x < 10:
```

```
    print(x)
```

```
    x += 1
```

• break statement



```
• • •

x = 1

while x < 6:
    print(x)
    if (x == 3):
        break
    x += 1
```

- continue statement



```
● ● ●  
  
x = 0  
while x < 6:  
    x += 1  
    if x == 3:  
        continue  
    print(x)
```


- else statement



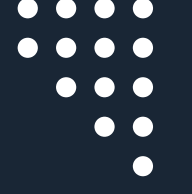
```
● ● ●  
  
x = 1  
while x < 6:  
    print(x)  
    x += 1  
else:  
    print("x is no longer less than 6")
```

• EXERCISE



1. Guess the secret number game

2. car game



THANKS FOR WATCHING

