If else statements python

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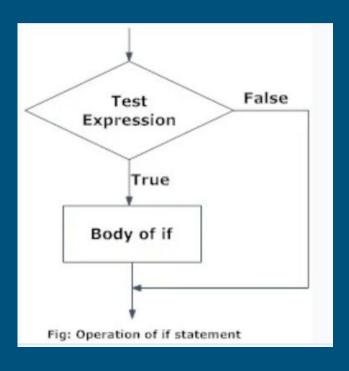
What is if...else statement in Python?

Decision making is required when we want to execute a code only if a certain condition is satisfied.

The if...elif...else statement is used in Python for decision making.

if test expression:
 statement(s)

Flowchart for if



Example

```
# If the number is positive, we print an appropriate message
num = 3
if num > 0:
    print(num, "is a positive number.")
print("This is always printed.")
num = -1
if num > 0:
    print(num, "is a positive number.")
print("This is also always printed.")
```

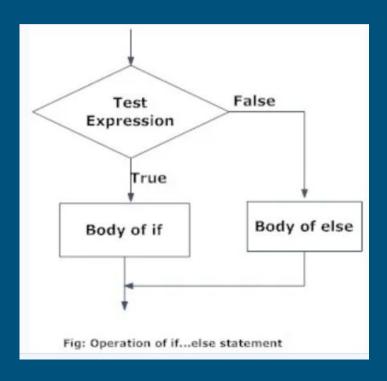
If else statement

```
if test expression:

Body of if
else:

Body of else
```

Flowchart



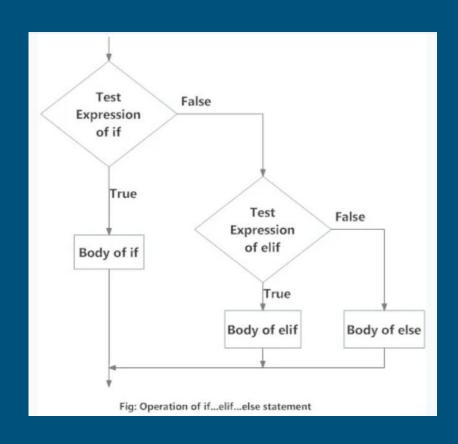
Example

```
# Program checks if the number is positive or negative
# And displays an appropriate message
num = 3
# Try these two variations as well.
\# num = -5
\# num = 0
if num >= 0:
    print("Positive or Zero")
else:
    print("Negative number")
```

If elif else

```
if test expression:
    Body of if
elif test expression:
    Body of elif
else:
    Body of else
```

Flowchart



Example

```
'''In this program,
we check if the number is positive or
negative or zero and
display an appropriate message'''
num = 3.4
# Try these two variations as well:
\# num = 0
# num = -4.5
if num > 0:
    print("Positive number")
elif num == 0:
    print("Zero")
else:
    print("Negative number")
```

Nested if else

```
'''In this program, we input a number
check if the number is positive or
negative or zero and display
an appropriate message
This time we use nested if statement'''
num = float(input("Enter a number: "))
if num >= 0:
   if num == 0:
        print("Zero")
    else:
        print("Positive number")
else:
    print("Negative number")
```

Any Questions?

References

https://www.programiz.com/python-programming/if-elif-else#:~:text=The%20elif%20is%20short%20for,body%20of%20else%20is%20executed.