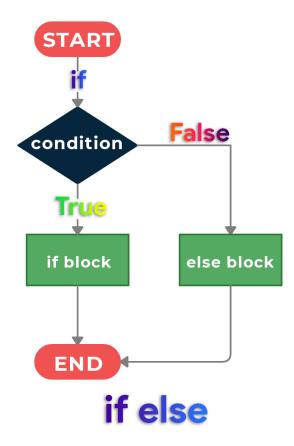


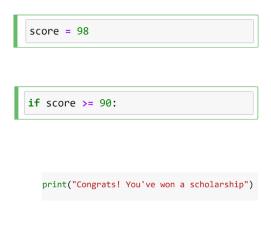
Python provides a set of controlflow elements for decision making and conditional execution - loops (for and while) and conditionals (if)

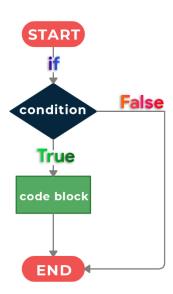
If a code block needs to get executed if and only if a condition is satisfied, then **if** conditional is helpful. A code block after the if statement is required and an optional else clause can be used.





Let's assume, if a candidate scores 90 or more on an exam, the candidate wins a scholarship, so the program should print "Congrats, You've won a scholarship" if the score is 90 or above.





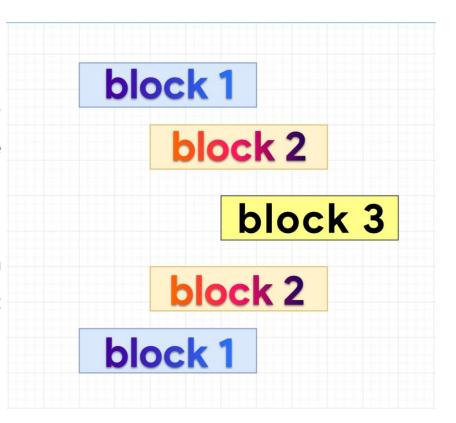
```
score = 98
if score >= 90: print("Congrats! You've won a scholarship")
```

Congrats! You've won a scholarship



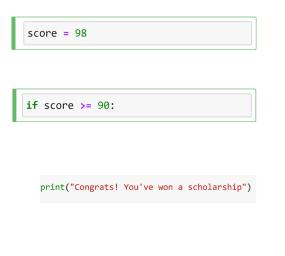
In Python indentation has special significance. In a Python program, a set of one or more contiguous statements that are indented to the same level is called a block (or suite)

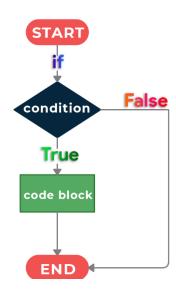
Blocks can be nested to arbitrary depth. Each indent defines a new block, and each outdent ends the preceding block. The resulting structure is readable, consistent, and intuitive.





Let's assume, if a candidate scores 90 or more on an exam, the candidate wins a scholarship, so the program should print "Congrats, You've won a scholarship" if the score is more than 90. If you press enter key after If statement's condition, the IDE will create a block.



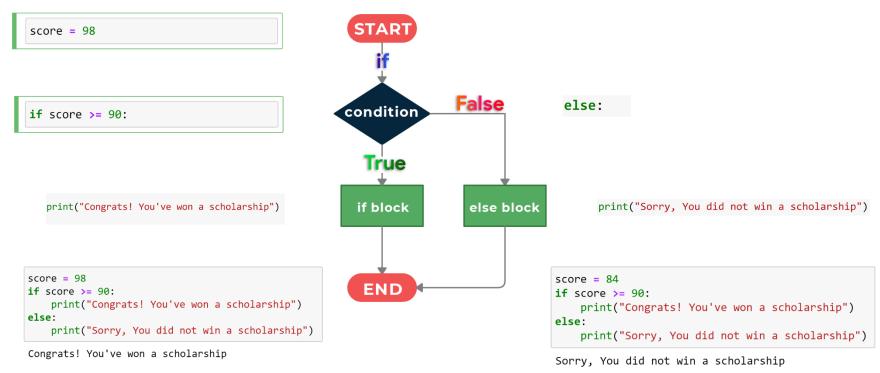


```
score = 98
if score >= 90:
    print("Congrats! You've won a scholarship")
```

block Congrats! You've won a scholarship



If it is required that we need to print "Sorry, You did not win a scholarship" for scores less than 90, we can use the else block.



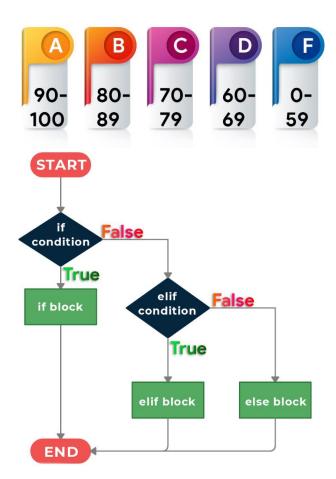


if statement executes a code block based on a condition. An else clause can be used for an alternative. If the control flow is based on several alternatives, one or more elif (short for else if) clauses can be used.

```
score = 88
if (score >= 90):
    print("Grade: A")
elif (score >= 80 and score <= 89):</pre>
    print("Grade: B")
elif (score >= 70 and score <= 79):</pre>
    print("Grade: C")
elif (score >= 60 and score <= 69):</pre>
    print("Grade: D")
elif (score <= 59):
    print("Grade: F")
else:
    print("Absent or Unknown Grade")
```

Grade: B







Online Resources

For best python resources, please visit:



gknxt.com/python/



