

CONDITIONAL EXECUTION



Choice – Yes or No

Notes

- [Timetable](#)
- [How to work with the course material?](#)

CONDITIONAL STEPS

if *question* :
 statement

```
if x > 0 :  
    print 'Positive'
```

COMPARISON OPERATORS

< less than

<= less than or equal

== equal to

>= greater than or equal

> greater than

!= not equal

Remember: = is used for assignment

LOGICAL OPERATORS

and

or

not

```
if x > 0 and x < 10:
```

```
    print 'x is greater than 0 and less than 10'
```

```
if n%2 == 0 or n%3 == 0:
```

```
    print 'the number is divisible by 2 or 3'
```

```
if not (n%2 == 0):
```

```
    print 'the number is odd'
```

```
if n%2 != 0:
```

ONE-WAY DECISIONS

```
if question :           if x > 0 :  
    statement               print 'Positive'  
    statement               print 'Greater than 0'  
    statement
```

INDENTATION

- **Increase indent** after an *if* statement (do not forget about :)
- **Maintain indent** to indicate the scope of the block (which lines are affected by the *if*)
- **Reduce indent** back to the level of the *if* statement to indicate the end of the block

- 4 spaces

```
if x > 0 :  
    print 'Positive'  
    print 'Greater than 0'  
print 'The end'
```

TWO WAY DECISIONS

if *question* :
 statement

else :
 statement

```
if x > 0 :  
    print 'Positive'  
else :  
    print 'Negative or zero'
```


MULTI WAY DECISIONS

```
if question :           if x > 0 :  
    statement               print 'Positive'  
elif question :       elif x < 0 :  
    statement               print 'Negative'  
else :                 else :  
    statement               print 'Zero'
```

NESTED DECISIONS

```
if x == y:
    print 'x and y are equal'
else:
    if x < y:
        print 'x is less than y'
    else:
        print 'x is greater than y'
```

TRY EXCEPT

try :

statement

statement

except :

statement

statement

```
try :
```

```
    number = int(string)
```

```
except :
```

```
    number = -1
```

RESERWED WORDS

if

and

or

not

else

elif

try

except

Questions

```
>> type(1)  
>> ???
```

```
>> type('True')  
>> ???
```

```
>> type(True)  
>> ???
```

Homework (students, number of days in month)

Questions?

Test 2

Questions?

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Exercises

<https://courses.cs.ut.ee/2017/nkp/fall/Main/During2>