

# CS-A113 Basics in Programming Y1

2nd Lecture  
21.09.2021



# The Lecture

- **Join with Video** – Makes my life nicer!
- Feel free to open your microphone and ask questions
- Feel free to write questions into the chat
- We will record the sessions and put it unlisted on youtube.



Interactions Today:

Go to: <https://kahoot.it/>

# Who are you?

Fill out the mandatory questionnaire  
until Thursday!

Thanks for helping research for those  
who already did! – Please help  
research for the others 😊





# FAQ

A+ CS-A1113 Basics in Programming Y1 ▾

## Course

CS-A1113

Course materials

Your points

Code Vault

Python documentation

## Course staff

Participants

Groups

All results

Visualizations

« Exercise 1

CS-A1113 / Round 1, The basics of Python programming /

## Exercise 2

Points 0 / 100

My submissions 1 / 10

Deadline To be s

Round 1, exercise 2: First program

First program

The exercise is about the following topics:

MyCourses SCHOOLS MY RECENT COURSES CORONAVIRUS INFO

CS-A1113 - Basics in Programming Y1, Lecture, 14.9.2021-9.12.2021

Participants

Grades

Sections ▾

- » Welcome to Basics in Programming Y1!
- » Course Requirements
- » Lectures
- » Exercises
- » Exercise Sessions
- » Slack workspace
- » The Gang and Contact
- » Setting up a Python IDE
- » **Asking for help**
- » Group work and plagiarism

Dashboard / My own courses / cs-a1113 - ba... / Sections /

## Asking for help

You can ask for help with the weekly Exercises eith

Asking for help with a well-defined ques

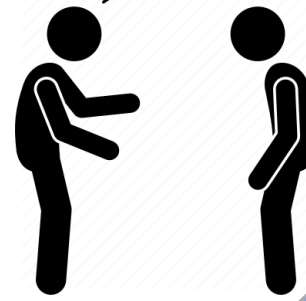
**"My program does not work, please help."** This this one take a lot of time for the answerer to try t



TRUE  
OR FALSE ?

Boolean Values &  
Logical Operators

Conditional Statements  
If then else



Loops

Topics Today

# Boolean Values & Logical Operators

TRUE  
or FALSE?

# Boolean Values & Logical Operators

Statements:

- a) Barbara Keller is the lecturer of CS-A1113 -> True
- b) Barbara Keller is the lecturer of CS-A1111 -> False
- c) You are a student of the lecture CS-A1113 -> True
- d) You are a student of the lecture CS-A1111 -> False



# Boolean Values & Logical Operators:

Operators:

not a: is the logical opposite of a

a and b: is True if both, a and b are True, otherwise False

a or b: is True, if either a or b, or both are True.

Go to: <https://kahoot.it/>



Statements:

- a) Barbara Keller is the lecturer of CS-A1113 -> True
- b) Barbara Keller is the lecturer of CS-A1111 -> False
- c) You are a student of the lecture CS-A1113 -> True
- d) You are a student of the lecture CS-A1111 -> False

Operators:

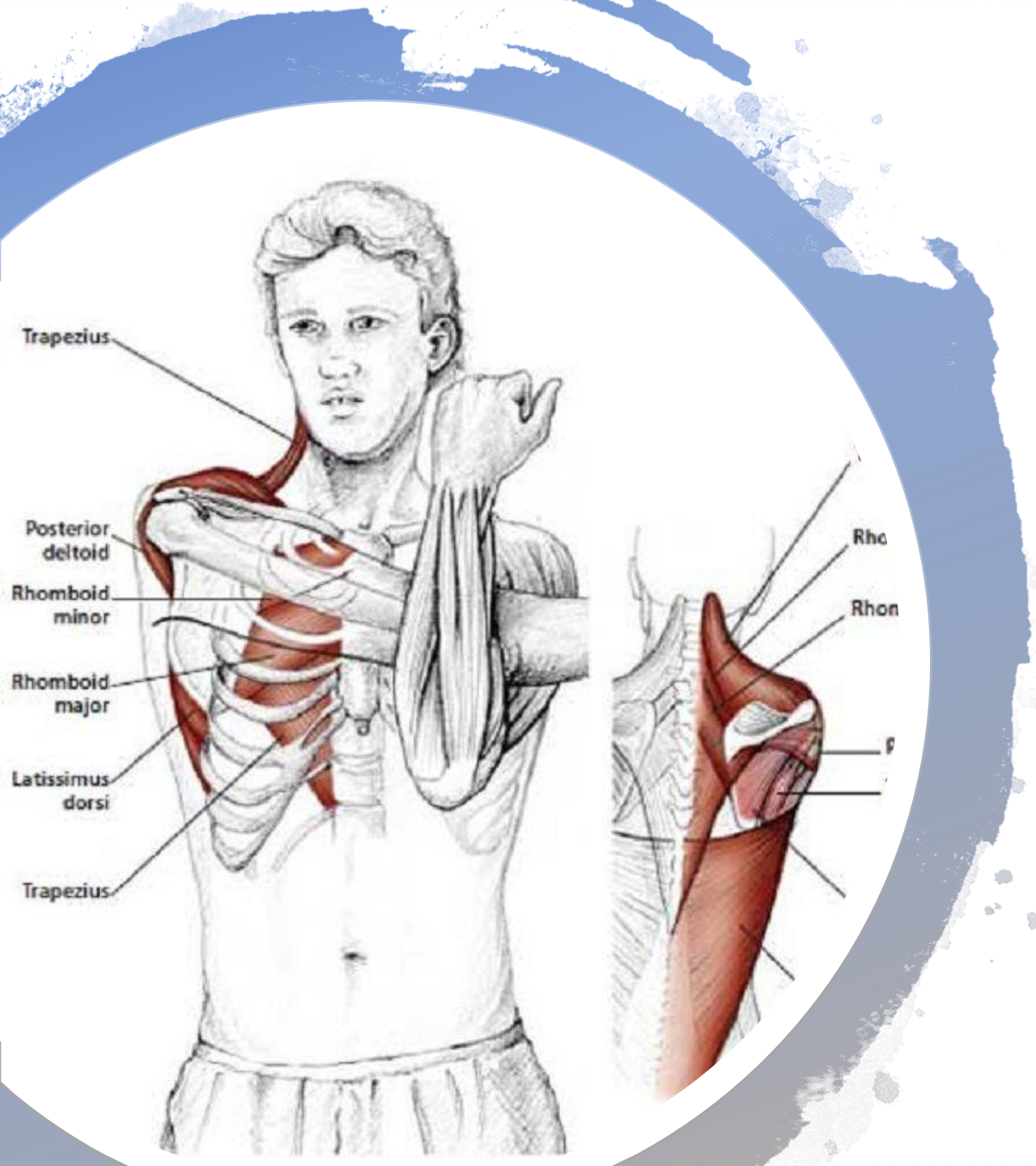
**not a:** is the logical opposite of a

**a and b:** is True if both, a and b are True, otherwise False

**a or b:** is True, if either a or b or both are True.




Do not apply  
in real life!



Break: Move your  
Shoulders

# Conditionals


A diagram illustrating a conditional statement. It features two black stick figures. The figure on the left is gesturing towards the figure on the right. A speech bubble originates from the left figure, containing the text: "Are you still in the shop?" followed by "Bring milk!".

Are you still in  
the shop?  
Bring milk!

if (you are still in the shop):  
bring milk



# Conditionals



Are you still in  
the shop?  
Bring milk!

if (you are still in the shop):  
    bring milk

else:  
    ask our neighbour for milk

# Conditionals

Are you in the  
K-Market or in  
the S-Market?



# Conditionals

if (in K-Market):

bring Pirkka Kahvi

elif (in S-Market):

bring Rainbow Kahvi

else:

bring any coffee and sugar!



# Conditional Example 1

```
def main():  
    age = int(input("Enter your age!\n"))  
    if (age < 18):  
        print("You cannot legally drink in Finland!")  
    else:  
        print("Enjoy your drink!")
```



Go to: <https://kahoot.it/>



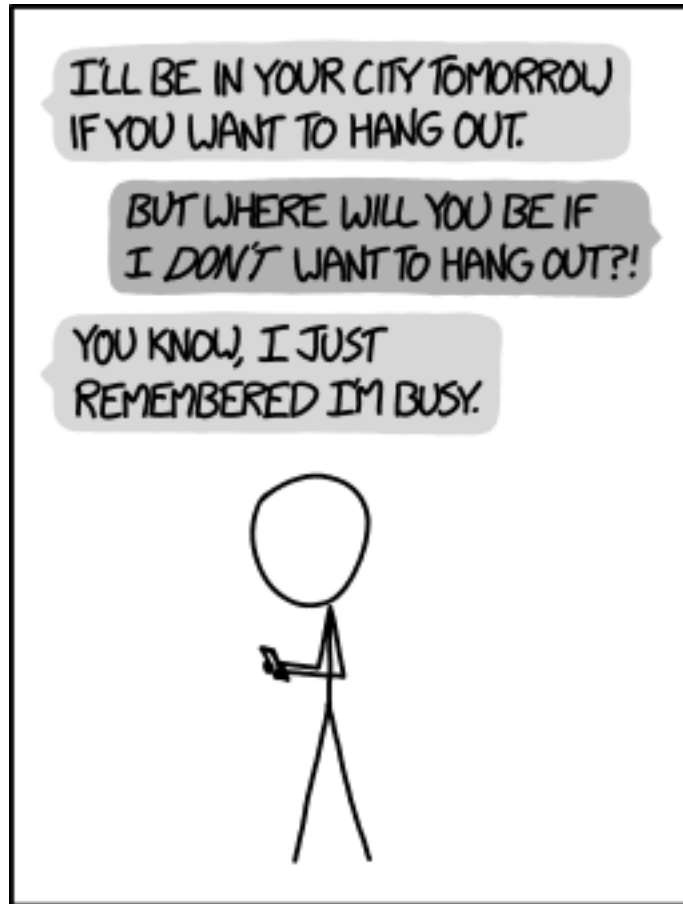
## Conditional Example 2

```
def main():  
    age = int(input("Enter your age!\n"))  
    if (age < 18):  
        print("No drinks (US or Fi)")  
    if (age < 21):  
        print("No drinks in the US, but enjoy your drink in Finland!")  
    else:  
        print("Enjoy your drink!")
```

elif



# Conditionals



WHY I TRY NOT TO BE  
PEDANTIC ABOUT CONDITIONALS.

<https://xkcd.com/>

```
def testBooleanValue(testVariable):  
    if testVariable:  
        print(testVariable)  
        print("was evaluated as True")  
    else:  
        print(testVariable)  
        print("was evaluated False")
```

# Boolean Values and Conditionals Revisited



Go to:  
<https://kahoot.it/>

Relays  
in Relay

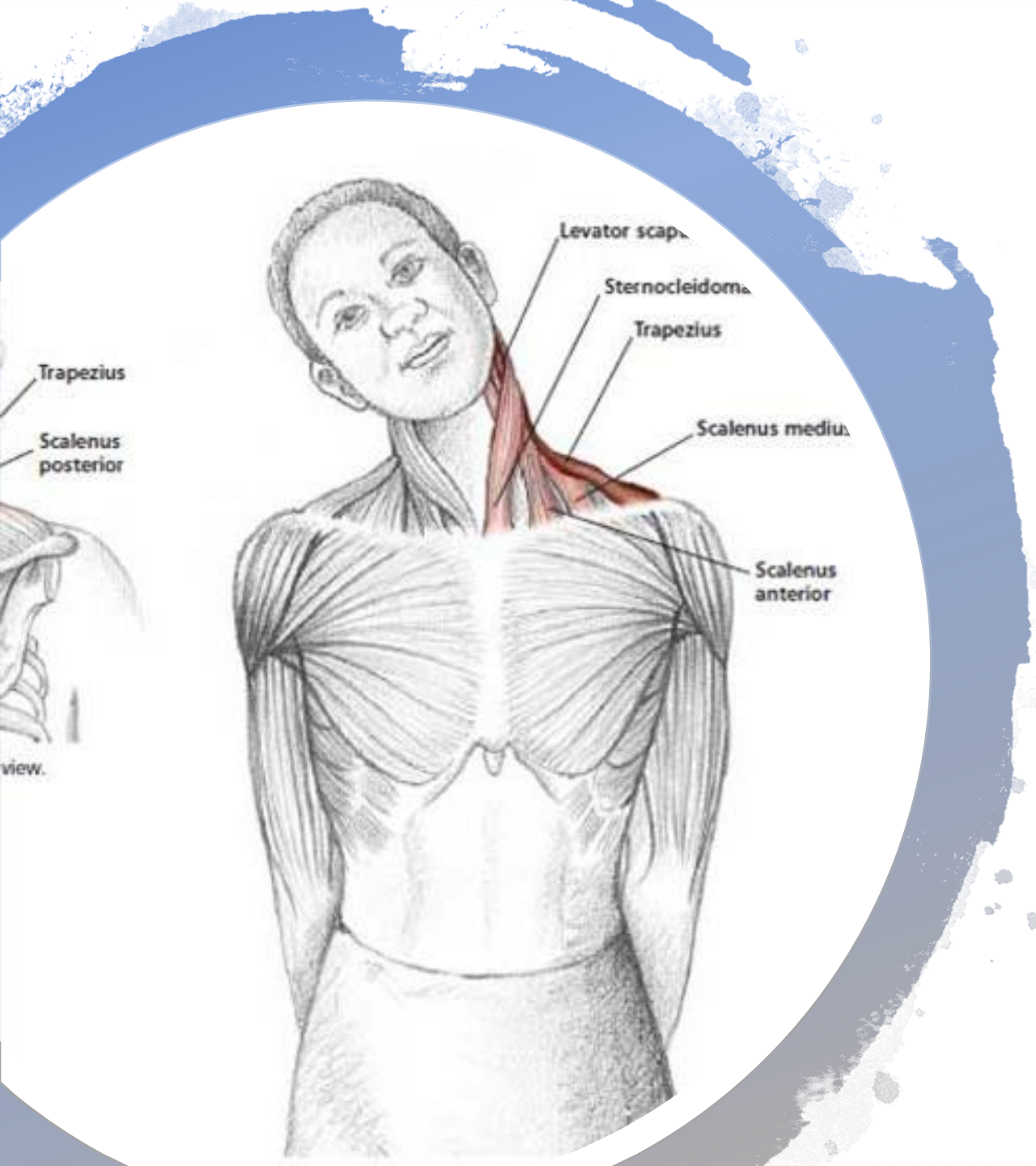
Started Cosine Tape  
Started Multi + Add



First actual case  
arrangement started.  
closed down.

# Bugs and Debugging





Break:  
Move your Neck!

# Loops

```
while (I am thirsty):  
    drink water
```

```
def countTo100():  
    i = 1  
    while i < 101:  
        print(i)  
        i += 1
```



Go to:  
<https://kahoot.it/>

# Loops

```
def superLoop():
```

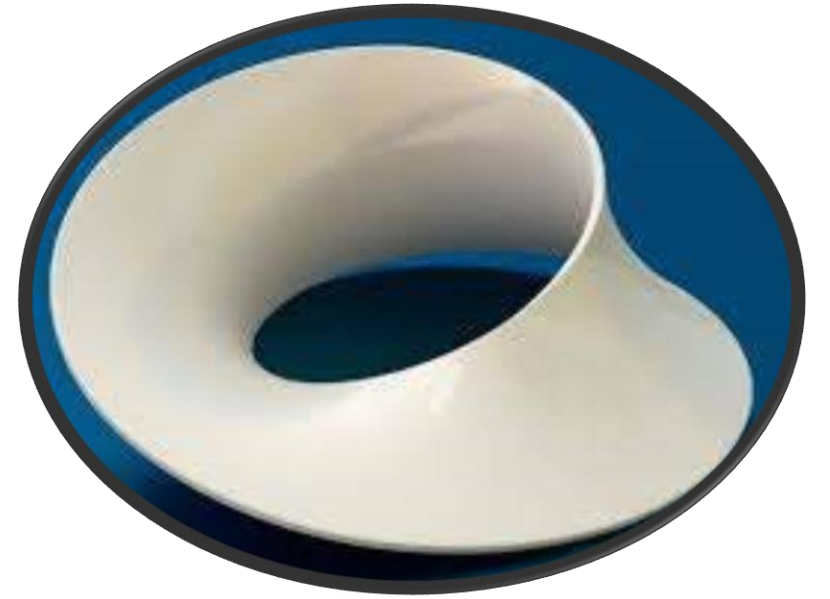
```
    i = 1
```

```
    j = i
```

```
    while i < 5:
```

```
        print(i)
```

```
        j += 1
```





*“That’s all Folks!”*

l s b e r g