

# Introduction to Programming with Scientific Applications

- Missing handins, deadline 15 May 2026
- Final project, deadline 31 May 2026
- Course evaluation
- Exam, 20 June 2026
- AOB

# Exam

- **5 hours, written exam, with aids, including PC but without internet**
- **Communication with others about the exam is not permitted during the exam**
- **WISEflow Device Monitor must be enabled**
- **AI assistants are not allowed**
- Reexam in August
- Grade is an *overall assessment* of the implementation project and the exam
  - The result of the final exam must meet the minimum requirements for acceptance to be able to pass the course
  - The final exam contributes 80% to the final grade
- **wiseflow.au.dk**
  - Download .zip + add missing code + upload .zip
- **Questions? – post them on Brightspace**

# Content of .zip file

```
A.py - C:\Users\au121\Desktop\ipsa22\ipsa22exam\A.py (3.11.3)
File Edit Format Run Options Window Help
INTERVAL SUM

Your task is to write a function interval_sum(i, j), that returns
the sum  $i + (i + 1) + \dots + j$ . Eg. for  $i = 10$  and  $j = 13$  the sum
returned should be  $10 + 11 + 12 + 13 = 46$ .

Input: Two lines, containing integers i and j, respectively.
It is guaranteed that  $1 \leq i \leq j \leq 100$ .

Output: The sum  $i + (i + 1) + \dots + j$ .

Example:

Input: 10
      13

Output: 46

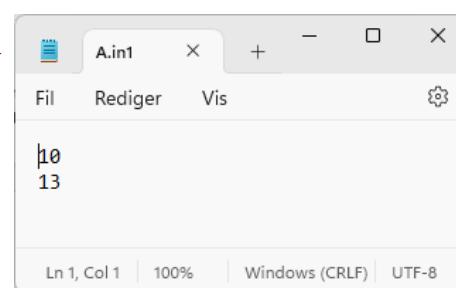
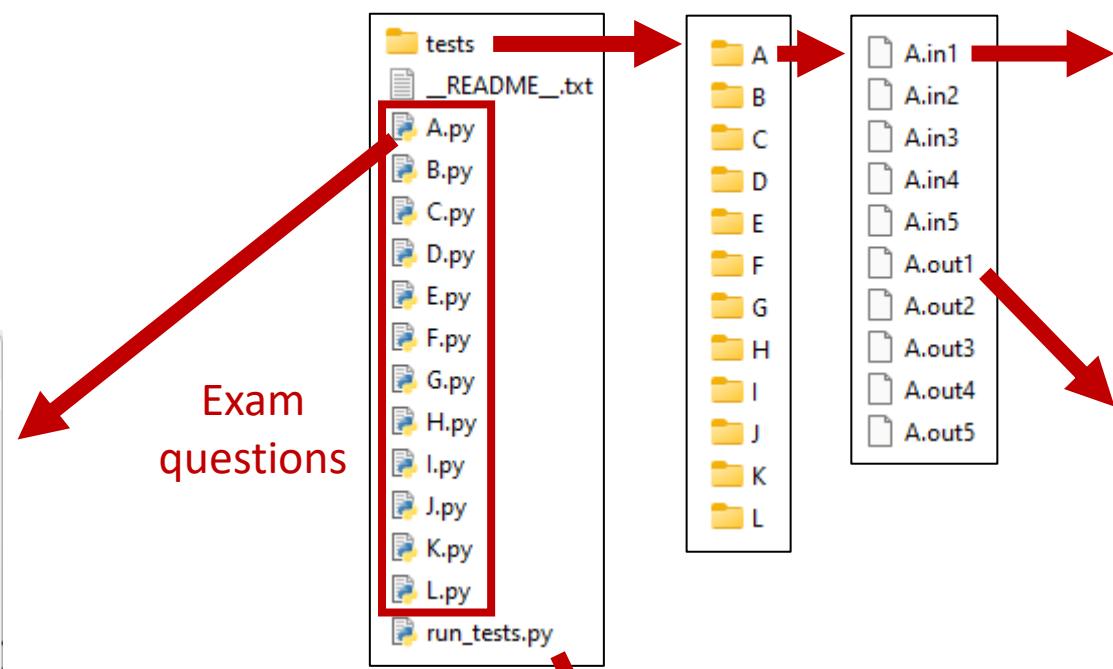
Note: The below code already handles the input and output.
...

def interval_sum(i, j):
    # insert code
    pass

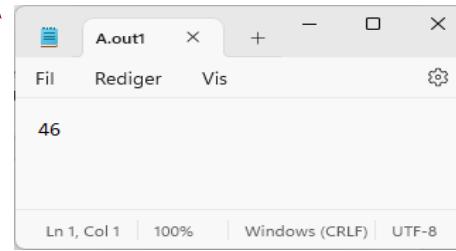
i = int(input())
j = int(input())
print(interval_sum(i, j))

Ln: 1 Col: 0
```

Exam  
questions



test input



test output

```
Command Prompt
(c) Microsoft Corporation. All rights reserved.

C:\Users\au121>cd Desktop\ipsa22\ipsa22exam

C:\Users\au121\Desktop\ipsa22\ipsa22exam>python run_tests.py A --verbose=-1

Tests passed:

A      0/5
-----
Total   0/5
=====

C:\Users\au121\Desktop\ipsa22\ipsa22exam>python run_tests.py A --verbose=3 --abort
A.py tests/A/A.in1 [failed]
  Input
  > 10
  > 13
  Correct output
  > 46
  Received output
  *> None

C:\Users\au121\Desktop\ipsa22\ipsa22exam>
```

\* = line with wrong output

- run\_tests.py arguments
- A B C ...  
exercises to evaluate  
default are all
  - --abort  
stop on first error
  - --verbose=value  
amount of output

# Evaluation of code

Don't expect partial scores  
for this solution

```
def interval_sum(i, j):  
    if i == 10 and j == 13:  
        return 46
```

- Each problem will be assigned a **weight**
- There will be problems of **varying difficulty**
- Code will be evaluated on **known test cases** and **unknown test cases**
- In general, **automatic scoring**, in some exceptional cases manual
- Put a **comment if you copied code from exercises/slides/documentation** to avoid plagiarism

**AOB ?**