Introduction to Python Language

HOMEWORK #1 - #3
DUE DATE: 16.12.2025

HW #1: A wildlife monitoring system records animal sightings throughout the day.
Each time a ranger sees an animal, they enter the number of animals observed.
The program should:

1. Repeatedly ask the user:`Enter number of animals seen (Enter to stop):`
2. Stop when the user presses Enter.
3. Compute and display:

- Total animals seen
- Average animals per report
- The highest number reported in one sighting
- The lowest number reported

Requirements:

Use a while loop

Handle invalid input (non-numeric) gracefully

HW #2: An online store tracks stock updates throughout the day. The program repeatedly asks the staff to input:

```
Enter stock change (+ for restock, - for sale, Enter to finish):
```

After the loop ends, the program should:

1. Calculate final inventory change
2. Count how many positive entries (restocks)
3. Count how many negative entries (sales)
4. Detect if any zero entry was made (no change)

Requirements:

- Use `while True:` with `break`
- Use input validation
- Use counters

HW #3: You will write a Python program that reads 32 student names from a file, randomly creates 16 groups of two students, and assigns each group one project topic (numbered 1–16).

Requirements:

1. Input File
   - File name: students.txt
   - Contains 32 student names, one per line:

```
Alice Brown
John Smith
Emma Clark
...
```

2. Group Creation
   - Read all names from the file.
   - Randomly shuffle the list.
   - Form 16 groups, each with 2 students:
   - Group 1 → Student A, Student B
   - Group 2 → Student C, Student D

3. Topics are numbered 1–16.
   -Assign each topic once to the 16 groups (no repetition).
   -Assignment must be random
   -Groups must be written into a file named assigned_groups.txt

4. You must:

•Use file reading and file writing
•Use the random module
•Use lists, loops, and at least one function
•Format output clearly