Department of Computer Science and Engineering
SRM University–AP

Python: Code2Xplore – 60 Days Challenge

Daily Submission Template

Challenge Title: User Profile Validation System

Subject: Hands on Python
Course Code: CSE205
Concerned Teacher: Dr. Yasir Afaq

Student Details

Student Name:DARPAN MANDAL Register Number: AP24110011511
Section: I
Date of Submission: 15-02-2026
GitHub Repository Link (Mandatory): _____

1. Problem Understanding

This program analyzes student login activity scores to detect security risk levels.
It ignores invalid (negative) values and categorizes valid scores into Low, Medium, High, and Critical risk.
The last digit (D) of the register number determines personalized filtering behavior.
If D is even, Low Risk scores are removed; if D is odd, Critical Risk scores are removed.
Finally, the program displays the filtered risk lists along with valid, ignored, and removed counts.

Briefly explain the problem statement in your own words (3–4 lines).

2. Logic / Approach Used

Explain the logic you used to solve the problem. Mention any personalized logic applied (mandatory).

The program extracts the last digit (D) of the register number to apply personalized logic. It uses a for loop to process each activity score, ignoring negative values and categorizing valid scores into risk levels using conditionals. After categorization, if D is even, Low Risk scores are removed; if D is odd, Critical Risk scores are removed. Finally, it displays the filtered lists and counts.

3. Personalization Applied (Mandatory)

Mention clearly **what personalization rule you used** and **why.**

Example:

- Last digit of Register Number = D

- Hence, I applied _____ logic.

  If D is even, I removed all Low Risk scores; if D is odd, I removed all Critical Risk scores, as per the mandatory personalized security filter requirement.

Test case verification

Test Case	Expected Output	Your Output
Test Case 1	Low Risk: [10, 30] Medium Risk: [45] High Risk: [78, 99] Critical Risk: [120, 150] Total Valid Entries: 7 Ignored Entries: 1	Low Risk: [10, 30] Medium Risk: [45] High Risk: [78, 99] Critical Risk: [120, 150] Total Valid Entries: 7 Ignored Entries: 1
Test Case 2	Low Risk: [] Medium Risk: [45] High Risk: [78, 99] Critical Risk: [120, 150] Total Valid Entries: 7 Ignored Entries: 1 Removed Due to Personalization: 2	Low Risk: [] Medium Risk: [45] High Risk: [78, 99] Critical Risk: [120, 150] Total Valid Entries: 7 Ignored Entries: 1 Removed Due to Personalization: 2
Test Case 3	Low Risk: [10, 30] Medium Risk: [45] High Risk: [78, 99] Critical Risk: [] Total Valid Entries: 7 Ignored Entries: 1 Removed Due to Personalization: 2	Low Risk: [10, 30] Medium Risk: [45] High Risk: [78, 99] Critical Risk: [] Total Valid Entries: 7 Ignored Entries: 1 Removed Due to Personalization: 2

Python Program

Paste your complete Python code below:

```
  registerno = input("Enter your Register Number: ")


D = int(registerno[-1])
```

```
print("Register Digit (D):", D)



n = int(input("Enter number of activity scores: "))



activity_scores = []

for i in range(n):

    val = int(input("Enter score: "))

    activity_scores = activity_scores + [val]



lrisk = []

mrisk = []

hrisk = []

crisk = []



ignore = 0

valid = 0



for score in activity_scores:
```

```
    if score < 0:

        ignore = ignore + 1



    else:

        valid = valid + 1



        if score <= 30:

            lrisk = lrisk + [score]



        elif score <= 60:

            mrisk = mrisk + [score]



        elif score <= 100:

            hrisk = hrisk + [score]



        else:

            crisk = crisk + [score]



rmcount = 0
```

```
if D % 2 == 0:
    rmcount = rmcount + len(lrisk)
    lrisk = []

else:
    rmcount = rmcount + len(crisk)
    crisk = []

print("\nAfter Personalized Filtering:")

print("Low Risk:", lrisk)
print("Medium Risk:", mrisk)
print("High Risk:", hrisk)
print("Critical Risk:", crisk)

print("\nTotal Valid Entries:", valid)
print("Ignored Entries:", ignore)
print("Removed Due to Personalization:", rmcount)
```

4. Learning Outcome

What did you learn from this challenge?

From this challenge, I learned how to process and clean data using loops and conditional statements in Python. I understood how to categorize data into multiple lists based on defined ranges. I also learned how to implement personalized logic using user-specific input (register digit). Additionally, I improved my understanding of counters, list handling without advanced functions, and structured program design.

Student Declaration

- I hereby declare that this submission is **my own original work**.
- I have **not used AI tools**, copied code from the internet, or shared code with others.
- I understand that **plagiarism will result in ZERO marks**.

Signed: Darpan Mandal
Date: 15/02/2026

Faculty In charge:
--dryasir