COSC 1336 – Fundamentals of Programming I
Exam 1 Project Assignment – Rent and Late Payment Calculation

Scenari

AllyBaba owns a residential property that is 2,200 sq. ft. in size, featuring 3 bedrooms and 2 bathrooms. The monthly rent for this property is **$2,500**, with additional **monthly usage fees** as applicable.

This program calculates and summarizes the tenant's total monthly payment, including any late fees based on the date the rent is paid.

Late Payment Rules

- **Assumption:** Each month has 30 days.
1. **On-Time Payment (Days 1–3):**
    - If rent is paid on or before the **3rd day** of the month, there is **no late fee**.
      lateFees = 0
2. **Late Payment (Days 4–30):**
    - A **$10 per day** late fee is applied for each day **after the 3rd**. Example:
      If rent is paid on the 4th,
      lateFees = (4 – 3) * $10 = $10
3. **Severely Late Payment (After the 30th):**
    - A **flat late fee** of **$2,000** is applied.
      lateFees = $2,000

User Inputs:

- Tenant's **name**
- **Month and year** of rent payment
- **Day of the month** the rent was paid
- **Monthly usage fees**

Program Output:

A detailed summary including:

- Tenant's **name**
- **Month and year**
- **Rent payment day**
- **Days late**
- **Monthly rent** ($2,500)
- **Usage fees**
- **Late fees**
- **Total amount due**

Development Requirements:

- Use **functions** to organize the program logic (e.g., for data input, late fee calculation, and result display).

- Include **input validation**, especially for date-related entries and positive numbers.
- Ensure **clear formatting** of the final summary for readability.

Sample #1 Output - (User entry is in RED)

Exam 3 Project
Written by: Ally Baba

AllyBaba House Rental Information

---- Input Section ------
Name of tenant: Ally Baba
Enter the month: January 2025
Enter day of the month: 2
Enter usage fees: 20.00

Rental Summary
--- Rental Transaction for the month of January 2025 ------
Name of tenant   Ally Baba
Day the rent is paid   2

Days Late   0 days

Monthly rent $2500.00
Usage fees $20.00
Late fees charges ($10/day) $0.00

Total Due for January 2023 $2520.00

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End of Exam 3 Project

Sample #2 Output (User entry is in RED)

Exam 3 Project
Written by: Ally Baba

AllyBaba House Rental Information

---- Input Section ------
Name of tenant: Ally Baba
Enter the month   January 2025
Enter day of the month   15
Enter Usage fees   20.00

Rental Summary
--- Rental Transaction for the month of January 2025 ------
Name of tenant   Ally Baba
Day the rent is paid   15

Days Late   12 days

Monthly rent $2500.00
Usage fee $20.00
Late fees charges ($10/day) $120.00

Total Due for January 2023 $2640.00

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End of Exam 3 Project

Sample #3 Output (User entry is in RED)

Exam 3 Project
Written by: Ally Baba

AllyBaba House Rental Information

---- Input Section ------
Name of tenant: Ally Baba
Enter the month   January 2025
Enter day of the month   33
Enter Usage fees   20.00

Rental Summary
--- Rental Transaction for the month of January 2025------
Name of tenant   Ally Baba
Day the rent is paid   33

Days Late   30

Monthly rent $2500.00
Usage fees $20.00
Late fees charges (onetime) $2000.00

Total Due for January 2023 $4520.00
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End of Exam 3 Project