* *Name: Anbo Xu*
* *Student ID: 202283890035*
* *Lab ID: 0*
* *Date: Mar 17*
* *URL of your remote GitHub repository:  git@github.com:xab901/Project-Semester-3.git*
* *A copy of the****$ git log****command showing all commits to your****Project-Semester3****remote GitHub repository:*

commit 2f58cb3a54923c7c6e190b18d3b679bcf4b59349 (HEAD -> main, origin/main)

Author: xab901 <xab901@outlook.com>

Date: Mon Mar 17 16:56:23 2025 +0800

Added python exercise

commit 6e6f302663e733de81188cdb02ee75cf6aceb5b5 (lab4)

Author: xab901 <xab901@outlook.com>

Date: Sun Mar 16 02:16:08 2025 +0800

NUIST is the best added

commit fb2f904bed836e379cd69b3dafdc0c2bf87b2c04

Author: xab901 <xab901@outlook.com>

Date: Sun Mar 16 02:05:02 2025 +0800

Added the lion and mouse story – Part 2

commit 9ef9324ffa15c857a504a6af1663bb01ffcee69a

Author: xab901 <xab901@outlook.com>

Date: Sun Mar 16 02:02:50 2025 +0800

Added the lion and mouse story – Part 1

commit a5be3c6d23728b02586749024b0525d5ad0ef50c

Author: xab901 <xab901@outlook.com>

Date: Sun Mar 16 02:01:15 2025 +0800

first commit

commit e18e4bedc31befcda665985cbdc7e3974a5b95b5

Author: xab901 <xab901@outlook.com>

Date: Wed Mar 12 09:22:01 2025 +0800

first commit

(END)

import random

# Exercise 1: Double the input number

print("\n--- Exercise 1 ---")

number = float(input("Enter a number: "))

print(f"Twice your number is: {number \* 2}")

# Exercise 2: Name in uppercase

print("\n--- Exercise 2 ---")

name = input("Enter your name: ")

print(f"Your name in uppercase is: {name.upper()}")

# Exercise 3: Number guessing game

print("\n--- Exercise 3 ---")

random\_number = random.randint(10, 20)

while True:

guess = int(input("Guess the number (between 10 and 20): "))

if guess == random\_number:

print("Congratulations! You guessed it correctly!")

break

# Exercise 4: Age-based discounts

print("\n--- Exercise 4 ---")

age = int(input("Enter your age: "))

if age <= 19:

print("You qualify for student discounts!")

elif age >= 55:

print("You can receive senior discounts!")

else:

print("You qualify for no age discounts.")

# Exercise 5: Factorial using while loop

def factorial\_while(*n*):

result = 1

while n > 0:

result \*= n

n -= 1

return result

print("\n--- Exercise 5 ---")

num = int(input("Enter a number to calculate factorial (while loop): "))

print(f"Factorial of {num} is: {factorial\_while(num)}")

# Exercise 6: Factorial using for loop

def factorial\_for(*n*):

result = 1

for i in range(1, n + 1):

result \*= i

return result

print("\n--- Exercise 6 ---")

num = int(input("Enter a number to calculate factorial (for loop): "))

print(f"Factorial of {num} is: {factorial\_for(num)}")

# Exercise 7: Student names with Evans surname

print("\n--- Exercise 7 ---")

studentNames = ["Lisa", "Liam", "Leo", "Larry", "Linda"]

# Print current list with Evans surname

print("Current list:")

for name in studentNames:

print(f"{name} Evans")

# Add new name to the list

new\_name = input("\nEnter a new name to add to the list: ")

studentNames.append(new\_name)

# Print updated list with Evans surname

print("\nUpdated list:")

for name in studentNames:

print(f"{name} Evans")