**Assignment 3**

**# Problem 1**

zander\_length = float(input("Enter the length of the zander (in cm): "))

size\_limit = 42

if zander\_length < size\_limit:

print(f"Release the fish back into the lake. It is {size\_limit - zander\_length} cm below the size limit.")

else:

print("The fish meets the size limit.")

**# Problem 2**

cabin\_class = input("Enter the cabin class (LUX, A, B, C): ").upper()

if cabin\_class == "LUX":

print("Upper-deck cabin with a balcony.")

elif cabin\_class == "A":

print("Above the car deck, equipped with a window.")

elif cabin\_class == "B":

print("Windowless cabin above the car deck.")

elif cabin\_class == "C":

print("Windowless cabin below the car deck.")

else:

print("Invalid cabin class.")

**# Problem 3**

gender = input("Enter biological gender (male/female): ").lower()

hemoglobin\_value = float(input("Enter hemoglobin value (g/l): "))

if gender == "female":

if hemoglobin\_value < 117:

print("Hemoglobin level is low.")

elif hemoglobin\_value > 155:

print("Hemoglobin level is high.")

else:

print("Hemoglobin level is normal.")

elif gender == "male":

if hemoglobin\_value < 134:

print("Hemoglobin level is low.")

elif hemoglobin\_value > 167:

print("Hemoglobin level is high.")

else:

print("Hemoglobin level is normal.")

else:

print("Invalid gender.")

**# Problem 4**

year = int(input("Enter a year: "))

if (year % 4 == 0 and year % 100 != 0) or (year % 400 == 0):

print(f"{year} is a leap year.")

else:

print(f"{year} is not a leap year.")