investment\_amount = int(input("Enter the investment amount: "))

while investment\_amount <= 0 or investment\_amount >= 50000:

        print("Invalid amount. Please enter a value greater than 0 and less than 50,000.")

        investment\_amount = int(input("Enter the investment amount: "))

interest\_rate = float(input("Enter the interest rate: "))

while interest\_rate <= 0 or interest\_rate >= 15:

        print("Invalid rate. Please enter a value greater than 0 and less than 15.")

        interest\_rate = float(input("Enter the interest rate: "))

investment\_years = int(input("Enter the investment duration in years: "))

while investment\_years <= 0:

        print("Invalid duration. Please enter a value greater than 0.")

        investment\_years = int(input("Enter the investment duration in years: "))

months = investment\_years \* 12

monthly\_rate = interest\_rate / 12 / 100

total = 0

for month in range(1, months + 1):

    total += investment\_amount

    interest = round(total \* monthly\_rate, 2)

    total += interest

    if month % 12 == 0:

        print(f"Year {month // 12}: ${round(total, 2)}")

print(f"\nAfter {investment\_years} years at {interest\_rate}% yearly interest,")

print(f"with a monthly investment of ${investment\_amount},")

print(f"the total investment value after compounding is ${round(total, 2)}")

print("Written by Javier Silva")

A screen shot of a computer

AI-generated content may be incorrect.