# interest\_calculation.py

while True:

try:

investment = int(input("Enter the investment amount (greater than 0 and less than 50000): "))

if investment > 0 and investment < 50000:

break

else:

print("Invalid amount. Please try again.")

except ValueError:

print("Please enter a valid number.")

while True:

try:

rate = float(input("Enter the interest rate (greater than 0 and less than 15): "))

if rate > 0 and rate < 15:

break

else:

print("Invalid rate. Please try again.")

except ValueError:

print("Please enter a valid number.")

while True:

try:

years = int(input("Enter the investment duration in years (greater than 0): "))

if years > 0:

break

else:

print("Invalid duration. Please try again.")

except ValueError:

print("Please enter a valid number.")

months = years \* 12

monthly\_rate = (rate / 100) / 12

current\_value = investment

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

current\_value += current\_value \* monthly\_rate

if month % 12 == 0:

print(f"Year {month // 12}: ${current\_value:,.2f}")

print(f"\nInvestment Summary:")

print(f"Initial Investment: ${investment:,.2f}")

print(f"Years: {years}")

print(f"Interest Rate: {rate}%")

print(f"Final Value after {years} years: ${current\_value:,.2f}")

print("\nCompleted by [Isaac Davis]")

https://github.com/isaacddavisii98-glitch/cybernetics-repo