Present Value - Python Exercise

# Question:

Using NumPy's pv() function, compute the present value of an investment yielding $10,000, 15 years from now with 3% inflation, and another with 10 years and 5% inflation.

# Question Explanation (20 words):

We need to calculate the present value of $10,000 using NumPy’s pv() function, considering inflation rates over time.

# Answer (Code):

# Import numpy as np  
import numpy as np  
  
# Calculate investment\_1  
investment\_1 = np.pv(rate=0.03, nper=15, pmt=0, fv=10000)  
  
# Calculate investment\_2  
investment\_2 = np.pv(rate=0.05, nper=10, pmt=0, fv=10000)  
  
# Print results  
print("Investment 1 is worth " + str(round(-investment\_1, 2)) + " in today's dollars")  
print("Investment 2 is worth " + str(round(-investment\_2, 2)) + " in today's dollars")

# Answer Explanation (20 words):

The np.pv() function computes present value. We pass rate, periods, payment (0), and future value to determine today's worth.

