Discounting Cash Flows - Python Exercise

# Question:

Calculate the net present value of the investment using np.npv() with discount rates of 3%, 5%, and 7% for given cash\_flows.

# Question Explanation (20 words):

We must calculate the net present value of given cash flows with different discount rates using NumPy’s np.npv() function.

# Answer (Code):

# Import numpy as np  
import numpy as np  
  
# Predefined array of cash flows  
cash\_flows = np.array([100, 100, 100, 100, 100])  
  
# Calculate investment\_1  
investment\_1 = np.npv(rate=0.03, values=cash\_flows)  
print("Investment 1's net present value is $" + str(round(investment\_1, 2)) + " in today's dollars")  
  
# Calculate investment\_2  
investment\_2 = np.npv(rate=0.05, values=cash\_flows)  
print("Investment 2's net present value is $" + str(round(investment\_2, 2)) + " in today's dollars")  
  
# Calculate investment\_3  
investment\_3 = np.npv(rate=0.07, values=cash\_flows)  
print("Investment 3's net present value is $" + str(round(investment\_3, 2)) + " in today's dollars")

# Answer Explanation (20 words):

The np.npv() function discounts each cash flow based on the specified rate, summing them to get net present value.

