ASSIGNMENT-1

**Name:**M.gnana sai likhitha

def calculate\_old\_regime\_tax(taxable\_income):

tax = 0

if taxable\_income <= 250000:

tax = 0

elif taxable\_income <= 500000:

tax = (taxable\_income - 250000) \* 0.05

elif taxable\_income <= 1000000:

tax = 250000 \* 0.05 + (taxable\_income - 500000) \* 0.20

else:

tax = 250000 \* 0.05 + 500000 \* 0.20 + (taxable\_income - 1000000) \* 0.30

# Rebate under 87A for income up to ₹5L

if taxable\_income <= 500000:

tax = 0

return tax \* 1.04 # Including 4% cess

def calculate\_new\_regime\_tax(taxable\_income):

tax = 0

slabs = [300000, 600000, 900000, 1200000, 1500000]

rates = [0.05, 0.10, 0.15, 0.20, 0.30]

prev\_limit = 0

for limit, rate in zip(slabs, rates):

if taxable\_income > limit:

tax += (limit - prev\_limit) \* rate

prev\_limit = limit

else:

tax += (taxable\_income - prev\_limit) \* rate

return tax \* 1.04 # Including 4% cess

# Income above ₹15L

if taxable\_income > 1500000:

tax += (taxable\_income - 1500000) \* 0.30

return tax \* 1.04 # Including 4% cess

try:

ctc = float(input("Enter Total CTC (₹): "))

bonus = float(input("Enter Total Bonus Amount (₹): "))

is\_bonus\_in\_ctc = input("Is bonus included in CTC? (yes/no): ").strip().lower()

if is\_bonus\_in\_ctc not in ['yes', 'no']:

raise ValueError("Please enter 'yes' or 'no'.")

total\_income = ctc if is\_bonus\_in\_ctc == 'yes' else ctc + bonus

# Standard deduction and 80C for Old Regime

standard\_deduction = 50000

section\_80c = 150000

total\_deductions\_old = standard\_deduction + section\_80c

taxable\_income\_old = max(total\_income - total\_deductions\_old, 0)

taxable\_income\_new = total\_income # No deductions in new regime

tax\_old = calculate\_old\_regime\_tax(taxable\_income\_old)

tax\_new = calculate\_new\_regime\_tax(taxable\_income\_new)

print("\n----- TAX CALCULATION SUMMARY -----")

print(f"Total Income: ₹{total\_income:,.2f}")

print(f"\n--- Old Regime ---")

print(f"Taxable Income: ₹{taxable\_income\_old:,.2f}")

print(f"Tax Payable (with cess): ₹{tax\_old:,.2f}")

print(f"\n--- New Regime ---")

print(f"Taxable Income: ₹{taxable\_income\_new:,.2f}")

print(f"Tax Payable (with cess): ₹{tax\_new:,.2f}")

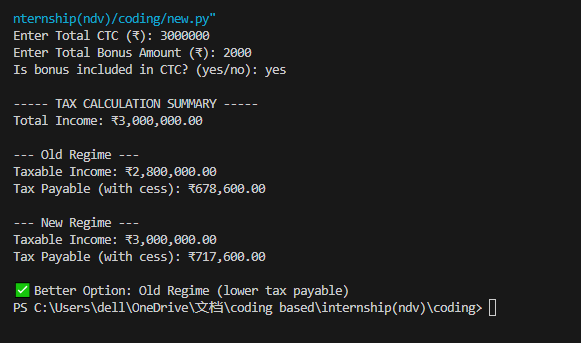
better = "Old Regime" if tax\_old < tax\_new else "New Regime"

print(f"\n Better Option: {better} (lower tax payable)")

except ValueError as e:

print("Error:", e)

**sample output:**

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