Module 6

# add additional formatting and logic.

materialCostList = []

laborCostList = []

overheadCostList = []

projectBenefitList = []

print('Project Analysis Program')

print('For MIS525')

print('February 2023 Session')

print('By Student Name')

continueAnalysis = 'Y'

while continueAnalysis == 'Y':

materialCostList.append(float(input('Enter Material Cost: ')))

laborCostList.append(float(input('Enter Labor Cost: ')))

overheadCostList.append(float(input('Enter Overhead Cost: ')))

projectBenefitList.append(float(input('Enter Projected Benefit: ')))

continueAnalysis = input('Would you like to enter another project? (Y/N): ').upper()

# Sort the project return list in descending order

projectReturnList = []

for i in range(len(materialCostList)):

totalProjectCost = materialCostList[i] + (laborCostList[i] + overheadCostList[i])

projectProfit = projectBenefitList[i] - totalProjectCost

projectReturn = projectProfit / totalProjectCost

projectReturnList.append(projectReturn)

sortedIndexList = sorted(range(len(projectReturnList)), key=lambda k: projectReturnList[k], reverse=True)

for i in sortedIndexList:

totalProjectCost = materialCostList[i] + (laborCostList[i] + overheadCostList[i])

projectProfit = projectBenefitList[i] - totalProjectCost

projectProfitPercent = projectProfit / totalProjectCost

print('========================================')

print('--- Summary Report for Project ' + str(i + 1))

print('Prepared by: John Doe')

print('Material Cost: ' + str(materialCostList[i]))

print('Labor Cost: ' + str(laborCostList[i]))

print('Overhead Cost: ' + str(overheadCostList[i]))

print('Total Cost: ' + str(totalProjectCost))

print('Cost Savings or Revenue Increase: ' + str(projectBenefitList[i]))

print('Project Profit: ' + str(projectProfit))

print('Project Return: {:.2%}'.format(projectProfitPercent))

if projectProfitPercent < 0:

print('Interpretation: Project not recommended for approval.')

elif projectProfitPercent == 0:

print('Interpretation: Neutral')

elif projectProfitPercent <= 0.05:

print('Interpretation: Recommended for approval.')

else:

print('Interpretation: Highly recommended for approval.')