Assignment 16 Habsatou War

Design to program to determine business travel expenses that are reimbursable.

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| **inputs:** |
| Number of Days of Trip - Integer |
| Air Travel Costs - Double |
| Total Lodging Costs for the trip - Double |
| Total Food Costs for the trip - Double |
| Status(Management or non-management) - RadioBox |

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| --- |
| **outputs:** |
| Total Travel Costs - Double |
| Total Amount Reimbursed by Company. - Double |
| Total Employee Responsible Amount - Double |

**Validations:**

**IF**  Number of Days of Trip isNumeric **THEN**

return true

**END IF**

**IF**  Air Travel Costs isNumeric **THEN**

return true

**END IF**

**IF**  Total Lodging Costs for the trip isNumeric **THEN**

return true

**END IF**

**IF**  Total Food Costs for the trip isNumeric **THEN**

return true

**END**

**Calculations**

Total Travel cost = GET (Number of Days of Trip, Air Travel Costs, Total Lodging Costs for the trip

, Total Food Costs for the trip)

return. Air Travel Costs + Total Lodging Costs for the trip + Total Food Costs for the trip

Total Amount Reimbursed by Company = GET (Number of Days of Trip)

**IF**  Management **THEN**

Total Amount Reimbursed by Company = (Total Food Costs for the trip perDiem + Total Lodging Costs for the trip PerDiem)\* Number of Days of Trip + 500

**ELSEIF**  Non-Management **THEN**

Total Amount Reimbursed by Company = (Total Food Costs for the trip perDim + Total Lodging Costs for the tripPerDim )\* Number of Days of Trip + 400

**END IF**

**return** Total Amount Reimbursed by Company

**END IF**

Total Employee Responsible Amount = Total Travel cost – Total Amount Reimbursed by Company

if Total Employee Responsible Amount < 0 Then Total Employee Responsible Amount = 0

**Test Cases. 1 Expected result Actual result**

Number of Days of Trip : 5 Total Travel Costs. : 1700 1700

Air Travel Costs. : 200. Total Amount Reimbursed by Company: 500 500

Total Lodging Costs for the trip: 200. Total Employee Responsible Amount. : 0 0

Total Food Costs for the trip: 100

Status : Management

**Test Cases. 2 Expected result Actual result**

Number of Days of Trip: 2. Total Travel Costs: 900 900

Air Travel Costs: 400 Total Amount Reimbursed by Company: 700. 700

Total Lodging Costs for the trip: 300 Total Employee Responsible Amount: 200. 200

Total Food Costs for the trip: 200

Status : Non Management

**Test Cases. 3 Expected result Actual result**

Number of Days of Trip : 8 Total Travel Costs. : 2150 2150

Air Travel Costs: 500 Total Amount Reimbursed by Company: 550 2100

Total Lodging Costs for the trip : 800 Total Employee Responsible Amount : 50 50

Total Food Costs for the trip : 850

Status : Management