IPO table: (idk how these work but this is what a google search showed up with)

|  |  |  |
| --- | --- | --- |
| Input | Processing | Output |
| List of employee work rates and hours | Calculate pay according to formula and given values | Each employee’s pay |

PSEUDOCODE:

FUNCTION calculatePay(PayRate, DayHoursArray)

TotalPay <- 0

DayId <- 0

WHILE DayId <= 6 DO

DayHour <- DayHoursArray[DayId]

HoursWorkedRegPay <- min(DayHour, 8)

HoursWorkedUnder3OverTime <- max(0,min(DayHour- HoursWorkedRegPay, 3))

HoursWorkedOver3OverTime <- max(0,DayHour- HoursWorkedRegPay-HoursWorkedUnder3OverTime)

PayRateDailyChange <- PayRate + BonusBasePayRate[DayId]

TotalPay <- TotalPay + HoursWorkedRegPay\*PayRateDailyChange + HoursWorkedUnder3OverTime\*OverTimeUnder3Rate[DayId]\*PayRateDailyChange + HoursWorkedUnder3OverTime\*OverTimeOver3Rate[DayId]\*PayRateDailyChange

DayId <- DayId+1

END WHILE

calculatePay <- TotalPay

END FUNCTION

(Note, this is missing 3 arrays, BonusBasePayRate, OverTimeUnder3Rate , OverTimeOver3Rate, as they are ment to be either global variables, or accessed somewhere else)

(Also the function inputs could just be done with Input(varname))

FLOWCHART: (Just look at attached powerpoint so you can zoom in)

Diagram

Description automatically generated

TRACE TABLE: (Based on Harry Grapes’ Data)

NOTE: im only putting 1 recording of the values per loop as they all only get changed/set once per loop

Table

Description automatically generated with low confidence

TRACE TABLE: (Based on Marg Plum’ Data)

NOTE: im only putting 1 recording of the values per loop as they all only get changed/set once per loop

Table

Description automatically generated with medium confidence