Module main()

//Declaring the necessary variables

//Two-dimensional array to store all hours of all employees

Int[][] twoDArray = new int[8][7]

//Array to store TOTAL HOURS worked for EACH employee during the week

Int[] totalHours = new int [8]

//Array to store days of the week

String[] daysOfTheWeek = {"Sunday", "Monday", "Tuesday", "Wednesday", "Thursday", "Friday", "Saturday"}

//Array to store employee names

String employees[] = new String[8]

//For loop to gather employee names

For (int i = 0; i < 8; i++)

Display "Enter the name of Employee: "

Input employees[i]

//For loop to gather hours worked each day for each employee

For (int j = 0; j < 7; j++) {

Display "Enter hours on " + daysOfTheWeek[j] + ": "

Input twoDArray[i][j]

End for

End for

//For loop which calculates the total number of hours worked for each row(each employee)

For (int i = 0; i < 8; ++i)

totalHours[i] = twoDArray[i][0] + twoDArray[i][1] + twoDArray[i][2] +twoDArray[i][3]

+ twoDArray[i][4] + twoDArray[i][5] + twoDArray[i][6]

End for

//Bubble sort to sort employee hours and names in descending order

Boolean needNextPass = true

For (int k = 1; k < 8 && needNextPass; k++)

// Array may be sorted and next pass not needed

needNextPass = false

For (int i = 0; i < 8 - k; i++)

If (totalHours[i] < totalHours[i + 1])

// Swap totalHours[i] with with totalHours[i + 1]

Int x = totalHours[i]

totalHours[i] = totalHours[i + 1]

totalHours[i + 1] = x

// Swap employees[i] with with employees[i + 1]

String y = employees[i]

employees[i] = employees[i + 1]

employees[i + 1] = y

needNextPass = true

End if

End for

End for

//For loop to display "employees" array and "totalHours" array after being sorted

Display "Employee details after sorting: "

For (int i = 0; i < totalHours.length; ++i)

Display "Employee: " + employees[i] + " hours: " + totalHours[i]

End for

End main