PSEUDO CODE

 Import **necessary modules**

* Import csv
* Import datetime

 Define **Employee\_Database class**

 Define **the \_\_init\_\_ method**

* Initialize self.employees list
* Initialize self.benefits dictionary
* Initialize self.employee\_rota list
* Initialize self.shifts list
* Initialize self.shift\_allotment dictionary

 **Define attendance\_record method**

* Create attendance dictionary
* Create employees\_lower dictionary with lowercase employee names
* Loop to take attendance:
  + Prompt user for employee name (or 'done' to finish)
  + If input is 'done', break the loop
  + Else if input is a valid employee name:
    - Record attendance with current date and time
    - Print recorded attendance
  + Else, print invalid employee name message
* If attendance dictionary is not empty:
  + Open 'employee\_attendance.csv' file in append mode
  + Write attendance records to file
  + Print the number of recorded attendances
* Else, print no attendance to record message

 **Define rota method**

* Reset self.shift\_allotment dictionary
* Loop through each shift in self.shifts:
  + Create employee\_shift list
  + Loop through each employee in self.employee\_rota:
    - If employee is available on shift day and required employees are not yet allocated:
      * Add employee to employee\_shift list
      * Update self.shift\_allotment dictionary
  + Print allocated employees for the shift day

 **Define employee\_benefits method**

* Prompt user for their name
* If name exists in self.benefits dictionary:
  + Print benefits for the employee
* Else, print employee not in system message

 **Define main\_menu method**

* Loop to display menu options:
  + Print menu options
  + Prompt user for choice
  + If choice is "1", call attendance\_record method
  + Else if choice is "2", call rota method
  + Else if choice is "3", call employee\_benefits method
  + Else if choice is "4", break the loop
  + Else, print invalid choice message

 **Print employee names**

* Print "Employee Names: [Sam, Alex, Henry, Julie, Jenny]"

 **If script is run as main**

* Create an instance of Employee\_Database
* Call main\_menu method