```cobol
        identification division.
        program-id. A4SALRPT.

        author.Niruthika Sivaruban
        date-written. 12/06/2024
       *
        ENVIRONMENT DIVISION.
        CONFIGURATION SECTION.
       *
        INPUT-OUTPUT SECTION.
       *
        FILE-CONTROL.
       *declaring the input file section
            SELECT input-file
            ASSIGN TO INFILE
            ORGANIZATION IS SEQUENTIAL.


       *declaring the output declaration
            select output-file
            assign to OUT
            ORGANIZATION IS SEQUENTIAL.


        data division.
        file section.

       *getting the information from the file section
        fd input-file
            data record is input-line
            record contains 28 characters.

       *declaring the variable from the variable
        01 input-line.
          05 il-EMPLOYEE-NUM pic x(3).
          05 il-EMPLOYEE-NAME pic x(15).
          05 il-EDUCATION-NO pic x.
          05 il-SERVICE-YEARS pic 99.
          05 il-PRESENT-SALARY pic 99999v99.

       *Declaring the Output file
        fd output-file
            recording mode is F
            data record is output-line
            record contains 86 characters.

        01 output-line pic x(86).

        working-storage section.
       *Heading variable
        01 ws-report-heading.
          05 filler pic x(28) value " Niruthika ,Assignment 4".
          05 filler pic x(16) value spaces.
          05 filler pic x(8) value "20240618".
          05 filler pic x(24) value spaces.
          05 filler pic x(7) value "1951043".

       *Salary report heading of the first paragraph
        01 ws-report-heading-1.
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       05 filler pic x(30) value spaces.
       05 filler pic x(22) value "EMPLOYEE SALARY REPORT".
       05 filler pic x(14) value spaces.
       05 filler pic x(5) value "PAGE:".
       05 ws-pages-num pic z9.
       05 filler pic x(13) value spaces.


     *Salary Report heading of the first heaidng line
      01 ws-report-heading-22.
       05 filler pic x value spaces.
       05 filler pic x(3) value "EMP".
       05 filler pic x(2) value spaces.
       05 filler pic x(3) value "EMP".
       05 filler pic x(28) value spaces.
       05 filler pic x(7) value "PRESENT".
       05 filler pic x(3) value spaces.
       05 filler pic x(8) value "INCREASE".
       05 filler pic x(5) value spaces.
       05 filler pic x(3) value "PAY".
       05 filler pic x(13) value spaces.
       05 filler pic x(4) value "NEW".
       05 filler pic x(6) value spaces.

     *Salary Report heainding of second line of the first paragraph
      01 ws-report-heading-3.
        05 filler pic x value spaces.
        05 filler pic x(3) value "NUM".
        05 filler pic x(2) value spaces.
        05 filler pic x(4) value "NAME".
        05 filler pic x(8) value spaces.
        05 filler pic x(5) value "YEARS".
        05 filler pic x value spaces.
        05 filler pic x(8) value "POSITION".
        05 filler pic x(3) value spaces.
        05 filler pic x(6) value "SALARY".
        05 filler pic x(6) value spaces.
        05 filler pic x value "%".
        05 filler pic x(9) value spaces.
        05 filler pic x(9) value "INCREASE".
        05 filler pic x(7) value spaces.
        05 filler pic x(6) value "SALARY".
        05 filler pic x(6) value spaces.

     * This shows the details of the employee
      01 ws-employee-info.
       05 filler pic x value spaces.
       05 ws-Employee-num pic x(3).
       05 filler pic x value spaces.
       05 ws-Employee-Name pic x(15).
       05 filler pic x(2) value spaces.
       05 ws-Employee-Years pic z9.
       05 filler pic x(2) value spaces.
       05 ws-position pic x(8).
       05 filler pic x(2) value spaces.
       05 ws-Current-Salary pic zz,zz9.99.
       05 filler pic x(2) value spaces.
       05 ws-Increased-Percentage pic z9.9.
       05 ws-Percentage-Increased redefines ws-Increased-Percentage.
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         10 ws-blank-line pic x(3).
      05 ws-SignPercentage pic x value "%".
      05 filler pic x(3) value spaces.
      05 ws-Pay-Increased pic $$$,$$9.99+.
      05 filler pic x value spaces.
      05 ws-SignPercentage-dollar pic x.
      05 filler pic x(2) value spaces.
      05 ws-New-salary pic zzz,zz9.99.
      05 filler pic x(6) value spaces.


   *employee data heading
    01 ws-employee-subtotal-title_1.
      05 filler pic x(16) value " EMPLOYEE CLASS:".
      05 filler pic x(8) value spaces.
      05 filler pic x(7) value "Analyst".
      05 filler pic x(4) value spaces.
      05 filler pic x(8) value "Sen Prog".
      05 filler pic x(4) value spaces.
      05 filler pic x(4) value "Prog".
      05 filler pic x(4) value spaces.
      05 filler pic x(7) value "Jr Prog".
      05 filler pic x(4) value spaces.
      05 filler pic x(12) value "Unclassified".

   * employee data heading 2
    01 ws-employee-subtotal-title_2.
      05 filler pic x(16) value " # ON THIS PAGE:".
      05 filler pic x(13) value spaces.
      05 ws-count-analyst pic z9.
      05 filler pic x(10) value spaces.
      05 ws-count-sen-prog pic z9.
      05 filler pic x(6) value spaces.
      05 ws-count-prog pic z9.
      05 filler pic x(9) value spaces.
      05 ws-count-jr-prog pic z9.
      05 filler pic x(14) value spaces.
      05 ws-unclassified-count pic z9.

   * final total of heading 1
    01 ws-final-total-heading-1.
      05 filler pic x(19) value " AVERAGE INCREASES:".
      05 filler pic x(3) value spaces.
      05 filler pic x(10) value "ANALYST=".
      05 filler pic x(5) value spaces.
      05 ws-average-analyst pic z,zz9.99.
      05 filler pic x(5) value spaces.
      05 filler pic x(11) value "SEN PROG=".
      05 filler pic x(3) value spaces.
      05 ws-average-sen-prog pic z,zz9.99.

   *final total of heading 1  2
    01 ws-final-total-heading-2.
      05 filler pic x(22) value spaces.
      05 filler pic x(7) value "PROG=".
      05 filler pic x(8) value spaces.
      05 ws-average-prog pic z,zz9.99.
      05 filler pic x(5) value spaces.
      05 filler pic x(10) value "JR PROG=".
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       05 filler pic x(4) value spaces.
       05 ws-average-jr-prog pic z,zz9.99.

   *calculation in the percentage value
    01 ws-percentage-calcs.
       05 ws-pay-increase pic 9(5)v99.
       05 ws-New-Salary-calculation pic 9(7)v99.
       05 ws-13-8-percentage pic 99v999 value 0.138.
       05 ws-9-3-percentage pic 99v999 value 0.103.
       05 ws-6-7-percentage pic 99v999 value 0.077.
       05 ws-3-2-percentage pic 99v999 value 0.042.

   *counter computation
    01 ws-counting.
       05 ws-counter-analyst pic 99 value 0.
       05 ws-counter-sen-prog pic 99 value 0.
       05 ws-counter-prog pic 99 value 0.
       05 ws-counter-jr-prog pic 99 value 0.
       05 ws-counter-unclaissified pic 99 value 0.
       05 ws-counter-analyst-rep pic 99 value 0.
       05 ws-counter-sen-prog-rep pic 99 value 0.
       05 ws-counter-prog-rep pic 99 value 0.
       05 ws-counter-jr-prog-rep pic 99 value 0.
       05 ws-pay-analyst pic 9(7)v99 value 0.
       05 ws-pay-sen-prog pic 9(7)v99 value 0.
       05 ws-pay-prog pic 9(7)v99 value 0.
       05 ws-jr-prog pic 9(7)v99 value 0.
       05 ws-interim-analyst pic 9(7)v99 value 0.
       05 ws-interim-sen-prog pic 9(7)v99 value 0.
       05 ws-interim-prog pic 9(7)v99 value 0.
       05 ws-interim-jr-prog pic 9(7)v99 value 0.

   *constant
    77 ws-per-page-lines pic 99 value 10.
    77 ws-count-page pic 99 value 0.
    77 ws-count-line pic 99 value 0.
    77 ws-empty-file pic x value "e".
    77 ws-opened-file pic x value "o".
    77 ws-first pic 9 value 1.
    77 ws-second pic 9 value 2.
    77 ws-set-analyst pic x(7) value "ANALYST".
    77 ws-set-prog pic x(7) value "PROG".
    77 ws-set-sen-prog pic x(8) value "SEN PROG".
    77 ws-set-jr-prog pic x(8) value "JR PROG".
    77 ws-set-content pic x(8).
    77 ws-perc-analyst pic 99v9 value 13.8.
    77 ws-perc-sen-prog pic 99v9 value 10.3.
    77 ws-perc-prog pic 99v9 value 7.7.
    77 ws-perc-jr-prog pic 99v9 value 4.2.
    77 ws-percent-holder pic 99v9.
    77 ws-percent-sign pic x value "%".
    77 ws-SignPerc-dollar-cont pic x value "$".

   *Flag selection is a process that begins with the selection

    01 ws-flags.
       05 ws-eof-flag pic x value "n".

    procedure division.
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    000-salary-report.

* open the files.
    perform 10-open-files.
    move ws-opened-file to ws-eof-flag.
*title of the report
    perform 20-write-report-heading.
*Showing the informations.
    perform 30-read-input.
*Display the data
    perform 400-processing-pages
        until ws-eof-flag equal ws-empty-file.

* total number of lines.
    perform 500-write-total-line.
    perform 600-close-file.

    goback.

*To begin, open the files.
 10-open-files.
    open input input-file.
    open output output-file.

*title report.
 20-write-report-heading.
    write output-line from ws-report-heading
      before advancing ws-second lines.

*Show the total number of lines.
 30-read-input.
    read input-file
        at end
            move ws-empty-file to ws-eof-flag.

*Subtotal should be printed.
 400-processing-pages.
    add ws-first to ws-count-page.
    move ws-count-page to ws-pages-num.

    perform 410-processing-headings.
    perform 420-processing-lines
      varying ws-count-line from ws-first by ws-first
      until (ws-count-line > ws-per-page-lines
             OR ws-eof-flag = ws-empty-file).

    perform 490-write-subtotal-line.

*The title of the report displays
 410-processing-headings.

    if (ws-count-page > ws-first) then
        write output-line from ws-report-heading-1
    else
        write output-line from ws-report-heading-1
    end-if.
    write output-line from ws-report-heading-22
      after advancing ws-second lines.
    write output-line from ws-report-heading-3
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            before advancing ws-second lines.

      *Selecting a line from the inputfile and displaying.
       420-processing-lines.

           move 0 to ws-percent-holder.
           move 0 to ws-pay-increase
           move 0 to ws-New-Salary-calculation.
           perform 430-processing-graduate.
           perform 440-process-non-graduate.
           perform 450-write-detail-line.
           perform 30-read-input.

      *Calculation of graduate
       430-processing-graduate.

           if (il-EDUCATION-NO equal "G") then

               if (il-SERVICE-YEARS > 15) then
                   move ws-set-analyst to ws-set-content
                   move ws-perc-analyst to ws-percent-holder

                   compute ws-pay-increase rounded = il-PRESENT-SALARY *
                     ws-13-8-percentage

                   compute ws-New-Salary-calculation rounded =
                   ws-pay-increase
                     +
                     il-PRESENT-SALARY

                   add 1 to ws-counter-analyst
                   add 1 to ws-counter-analyst-rep
                   add ws-pay-increase to ws-pay-analyst
               else
                   if ((il-SERVICE-YEARS >= 7) and (il-SERVICE-YEARS <=
                                           15))
                     then
                       move ws-set-sen-prog to ws-set-content
                       move ws-perc-sen-prog
                         to ws-percent-holder

                       compute ws-pay-increase rounded =
                         il-PRESENT-SALARY *
                         ws-9-3-percentage
                       compute ws-New-Salary-calculation rounded =
                         ws-pay-increase +
                         il-PRESENT-SALARY

                       add 1 to ws-counter-sen-prog
                       add 1 to ws-counter-sen-prog-rep
                       add ws-pay-increase
                         to ws-pay-sen-prog
                   else
                       if ((il-SERVICE-YEARS < 7) and (il-SERVICE-YEARS
                                               > 2))
                         then
                           move ws-set-prog to ws-set-content
                           move ws-perc-prog
                             to ws-percent-holder
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                            compute ws-pay-increase rounded =
                              il-PRESENT-SALARY *
                              ws-6-7-percentage
                            compute ws-New-Salary-calculation rounded =
                              ws-pay-increase +
                              il-PRESENT-SALARY

                            add 1 to ws-counter-prog
                            add 1 to ws-counter-prog-rep
                            add ws-pay-increase
                              to ws-pay-prog
                        else
                            move spaces to ws-set-content
                            move 0 to ws-pay-increase
                            move 0 to ws-percent-holder
                            add 1 to ws-counter-unclaissified

                            compute ws-New-Salary-calculation rounded =
                              ws-pay-increase +
                              il-PRESENT-SALARY

                        end-if
                    end-if
                end-if
            end-if.

    *Showing the personal details in final report.
     450-write-detail-line.
        move spaces to ws-employee-info.
        move il-EMPLOYEE-NUM to ws-Employee-num.
        move il-EMPLOYEE-NAME to ws-Employee-Name.
        move il-SERVICE-YEARS to ws-Employee-Years.
        move il-PRESENT-SALARY to ws-Current-Salary.
        move ws-set-content to ws-position.
        if (ws-percent-holder equal 0) then
            move spaces to ws-blank-line
        else
            move ws-percent-holder to ws-Increased-Percentage
            move ws-percent-sign to ws-SignPercentage
        end-if.

        move ws-pay-increase to ws-Pay-Increased.
        move ws-New-Salary-calculation to ws-New-Salary.
        move ws-SignPerc-dollar-cont to ws-SignPercentage-dollar.
        write output-line from ws-employee-info
          before advancing ws-first line.
    *
    * Calculation of non graduate.
     440-process-non-graduate.

        if (il-EDUCATION-NO equal "N") then
            if (il-SERVICE-YEARS > 10) then

                move ws-set-prog to ws-set-content
                move ws-perc-prog to ws-percent-holder

                compute ws-pay-increase rounded = il-PRESENT-SALARY *
                  ws-6-7-percentage
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                    compute ws-New-Salary-calculation rounded =
                    ws-pay-increase
                      +
                      il-PRESENT-SALARY
                    add 1 to ws-counter-prog
                    add 1 to ws-counter-prog-rep
                    add ws-pay-increase to ws-pay-prog

              else
                  if ((il-SERVICE-YEARS <= 10) and (il-SERVICE-YEARS >
                                              4))
                    then
                      move ws-set-jr-prog to ws-set-content
                      move ws-perc-jr-prog
                        to ws-percent-holder

                      compute ws-pay-increase rounded =
                        il-PRESENT-SALARY *
                        ws-3-2-percentage
                      compute ws-New-Salary-calculation rounded =
                        ws-pay-increase + il-PRESENT-SALARY

                      add 1 to ws-counter-jr-prog
                      add 1 to ws-counter-jr-prog-rep
                      add ws-pay-increase to ws-jr-prog
                    else
                      if (il-SERVICE-YEARS <= 4) then
                          move spaces to ws-set-content
                          move 0 to ws-pay-increase
                          move 0 to ws-percent-holder
                          compute ws-New-Salary-calculation rounded =
                            ws-pay-increase +
                            il-PRESENT-SALARY
                          add 1 to ws-counter-unclaissified
                      end-if
                  end-if
              end-if
          end-if.

      *Taking the subtotal into account.
       490-write-subtotal-line.
          move ws-counter-analyst to ws-count-analyst.
          move ws-counter-sen-prog to ws-count-sen-prog.
          move ws-counter-prog to ws-count-prog.
          move ws-counter-jr-prog to ws-count-jr-prog.
          move ws-counter-unclaissified
            to ws-unclassified-count.
          write output-line from ws-employee-subtotal-title_1
            after advancing ws-first line.
          write output-line from ws-employee-subtotal-title_2
            before advancing ws-second lines.
          move 0 to ws-counter-analyst.
          move 0 to ws-counter-sen-prog.
          move 0 to ws-counter-prog.
          move 0 to ws-counter-jr-prog.
          move 0 to ws-counter-unclaissified.

      *Write the total lines
       500-write-total-line.
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        compute ws-interim-analyst rounded = ws-pay-analyst /
          ws-counter-analyst-rep.
        compute ws-interim-sen-prog rounded = ws-pay-sen-prog /
          ws-counter-sen-prog-rep.
        compute ws-interim-prog rounded = ws-pay-prog /
          ws-counter-prog-rep.
        compute ws-interim-jr-prog rounded = ws-jr-prog /
          ws-counter-jr-prog-rep.

        move ws-interim-analyst to ws-average-analyst.
        move ws-interim-sen-prog to ws-average-sen-prog.
        move ws-interim-prog to ws-average-prog.
        move ws-interim-jr-prog to ws-average-jr-prog.

        write output-line from ws-final-total-heading-1
          after advancing ws-first line.
        write output-line from ws-final-total-heading-2.

    *Close the file
     600-close-file.
        close output-file, input-file.

     end program A4SALRPT.
```