

25. Repetition using *PERFORM..UNTIL*

The computer can be instructed to repeat a paragraph - or a group of paragraphs - until a certain condition is true.

e.g. *PERFORM PROCESS-STUDENT-INFO UNTIL STUDENT-NO > 9*

The computer will carry out paragraph *PROCESS-STUDENT-INFO* as long as *STUDENT-NO* is not greater than 9.

Example

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DATA DIVISION.
WORKING-STORAGE SECTION.
01 STUDENT-INFORMATION.
   05 STUDENT-NAME PIC X(30).
   05 ENGLISH-MARK PIC 999.
   05 MATHS-MARK PIC 999.
   05 AVERAGE-MARK PIC 999.
01 CHOICE PIC X.
PROCEDURE DIVISION.
MAIN-PARA.
   MOVE 'Y' TO CHOICE
   PERFORM GET-STUDENT-DETAILS THRU
       CHECK-FOR-MORE-STUDENTS UNTIL
           CHOICE = 'N'
   STOP RUN.
GET-STUDENT-DETAILS.
   DISPLAY 'NAME ?' ACCEPT STUDENT-NAME
   DISPLAY 'ENGLISH MARK ?'
       ACCEPT ENGLISH-MARK
   DISPLAY 'MATHS MARK ?' ACCEPT MATHS-MARK.
CALCULATE-AVERAGE.
   COMPUTE AVERAGE-MARK =
       (ENGLISH-MARK + MATHS-MARK) / 2.
PRINT-REPORT.
   DISPLAY STUDENT-NAME STUDENT-NO
   DISPLAY 'AVERAGE = ' AVERAGE-MARK.
CHECK-FOR-MORE-STUDENTS.
   DISPLAY 'ANY MORE STUDENTS ? - Y/N'
   ACCEPT CHOICE.
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Exercises

1. Write a program which will ask for a worker's name, hours worked and hourly rate of pay, calculate his gross weekly wage, deduct tax at 30% and print a payslip showing the gross weekly wage, tax for the week and net weekly pay - then go on to do the same for the next employee and so on until the last employee (number 19) has been processed.
2. Write a program which will ask for a student's name and marks in three subjects, calculate the average and print a report - then ask if there are any more students on the list: carrying on to the next student if the response is 'Y' - otherwise stopping.