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Roll no - 48.

Step 1: START

Step 2: Include necessary header files.

Step 3: Declare a structure macro with members opcode, open[] and label[] and structured.

Step 4: Declare arrays for labels, opcode, macroname, operand, new label and new operand.

Step 5: Declare necessary variables. and file pointers.

Step 6: Open file MACIN.DAT in read mode and MACOUT.DAT and DEFTAB.DAT in write mode.

Step 7: Read the input file (first line).

Step 8: Do the following till opcode - bnd

Step 8.1: if opcode in macro.
perform the following

Step 8.1.1 - copy the macroname and label.

~~Step~~

Step 8.1.1 - Copy the macro name and label.

Step 8.1.2 Read the next line of input line.

Step 8.1.3 - Set line = 0.

Step 8.1.4 - Perform the following till the

opcode is END

Step 8.1.4.1: Write the label operand and opcode to a file.

Step 8.1.4.2: Copy the corresponding opcode operand and label.

Step 8.1.4.3: Read the next input line.

Step 8.1.4.4: Increment line++ and go to step 8.1.4.

Step 8.2 - If the opcode and macro name are the same perform the following.

Step 8.2.1 - write the label, opcode, operand values of all the lines output file.

Step 9.3 - otherwise.

Step 8.2.1 - write the label, opcode operand to output file.

Step 8.3.2 - Read the next line of output file.

Step 9 - write the remaining label, opcode and its operand to output file.

Step 10 : close all the files

Step 11 - Display completed message

Step 12 - STOP.