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**COURSE CODE: CSC 235**

**COURSE: INTRODUCTION TO OBJECT ORIENTED PROGRAMMING**

**TOPIC- DUPLICATE FILES AND SELF DESCRIBING NUMBERS -PSEUDOCODE.**

PSEUDOCODE FOR SELF DESCRIBING NUMBERS

1. START

2. READ NUMOFTESTS

3. SET T AS INT(NUMOFTESTS)

4. SET SELF DESCRIBING AS 'Y'

5. SET I AS 0

6. WHILE (I<T)

READ NUMTOBECHECKEDSTRING

SET NUMTOBECHECKED AS INT(NUMTOBECHECKEDSTRING)

IF I=T-1

SET NUMLENGTH AS STRLEN(NUMTOBECHECKEDSTRING)

ELSE

SET NUMLENGTH AS STRLEN(NUMTOBECHECKEDSTRING)

FOR (INT M=0, M<NUMLENGTH, M++)

CONVERT NUMTOBECHECKEDSTRING TO NUMTOBECHECKED (INTEGER)

FOR (INT K=0, K<NUMLENGTH, K++)

SET COUNTER AS O

FOR (J=0,J<NUMLENGTH, J++)

IF NUMTOBECHECKED [J] == K)

SET COUNTER AS COUNTER +1

IF COUNTER == NUMTOBECHECKED [K]

SET SELF DESCRIBING AS Y

ELSE

SET SELF DESCRIBING AS F

PRINT 'NOT SELF DESCRIBING'

BREAK

IF SELF DESCRIBING== Y

PRINT 'SELF DESCRIBING '

SET I AS I +1

7. STOP

PSEUDOCODE FOR DUPLICATE FILES

1 START

2 READ STRNUMOFCASES

3 SET NUMOFCASES AS INT(STRNUMOFCASES)

4 (INT I=0, I<NUMOFCASES, I++)

READ STRNUMOFFILESINCASE

SET NUMOFFILESINCASE AS INT(STRNUMOFFILESINCASE)

SET J AS 0

WHILE (J=NUMOFFILESINCASE)

IF (J=0)

READ FIRST CASE

SET LENGTH AS STRLEN (FIRST CASE)-1

SET FILEID AS FIRST CASE[LENGTH-1]

CORRECTFILEIDS[0]= INT(FILEID)

SET K AS 0

WHILE (FIRSTCASE[K] != ‘ ‘)

SET FIRSTCASEFILENAME[K] AS FIRSTCASE[K]

SET K AS K+1

ELSE

READ OTHERCASES

IF((I==NUMOFTESTCASES-1) AND (J==NUMOFFILESINCASE-1))

SET LENGTH AS STRLEN(OTHERCASES)

ELSE

SET LENGTH AS STRLEN(OTHERCASES)-1

SET K AS 0

WHILE (OTHERCASES[K] != ‘ ’)

OTHERCASESFILENAME[K] = OTHERCASES[K]

SET K AS K+1

SET VALUE AS 1

SET RESULT AS ‘Y’

FOR(INT D=0, D<STRLEN(FIRSTCASE)-1,D++)

IF (OTHERCASEFILENMAE[D]==FIRSTCASEFILENAME[D])

SET RESULT AS ‘Y’

ELSE

SET RESULT AS ‘N’

BREAK

IF RESULTS != ‘N’

IF INT(OTHERCASES[LENGTH-1])<CORRECTFILEIDS[0]

CORRECTFILEID[0]=INT(OTHERCASES[LENGTH-1])

ELSE

SET FILEID AS INT(OTHERCASES[LENGTH-1])

SET CORRECTFILEIDS[VALUE] AS FILEID

SET VALUE AS VALUE + 1

SET J AS J+1

PRINT CORRECTFILEIDS

5 STOP