SSN COLLEGE OF ENGINEERING, KALAVAKKAM

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Compiler Lab – UCS 1602

Programming Assignment-7 **-** Generation of Intermediate Code using Lex and Yacc

The new Language **Pascal-2021** is introduced with the following programming constructs

**Data types**

integer

real

char

**Operators**

+, -, \* and /

Precedence 🡪 \* and / have lesser priority than + and –

Associativity 🡪 \* and / 🡪 right , + and - 🡪 left

**Declaration statement**

var: type;

var: type=constant;

Example

a: integer;

b: integer = 5;

Generate Intermediate code (TAC sequences) for the code involving conditional and assignment statements.

**Conditional Statement**

if condition then

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else

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end if

Generate Intermediate code in the form of Three Address Code sequence for the sample input program written using declaration, conditional and assignment statements in new language **Pascal-2021**, Following is the sample input

**INPUT**

var i:integer=1;

var a:integer=4;

var b:integer=3;

var c:integer=6;

var d:integer=2;

var x:integer;

begin

if (i>0) then

x=a+b\*c/d;

else

x=a\*b\*c-d;

end if

end

**OUTPUT**

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