

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

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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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